

# Revision of the Eupelmidae Walker, 1833 described by Jean Risbec. Part 1: the slide mounted specimens housed at the Muséum national d'Histoire naturelle in Paris

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## ABSTRACT

The present contribution is a catalogue of the Jean Risbec collection, including specimens mounted on microscope slides and belonging to Eupelmidae Walker, 1833 or originally described in Eupelmidae, as well as the point-mounted or card mounted specimens originally on these slides. Lectotypes are designated for 19 species. Eleven new combinations are proposed. The genus *Fanamokala* Risbec, 1960 described in Pteromalidae Dalman, 1820 is treated as a junior synonym of *Eupelmus* Dalman, 1820, subgenus *Episolindelia* Girault, 1914 n. syn. The following seven specific or subspecific synonymies are made: *Anastatus aliberti* var. *bruniptera* Risbec, 1951, *Anastatus nezarae* Risbec, 1951, and *Anastatus rhynchitidi* Risbec, 1951 n. syn. of *Anastatus* (*Anastatus*) *aliberti* Risbec, 1951, *Brasema leersiae* var. *garouae* Risbec, 1955 n. syn. of *Eupelmus* (*Episolindelia*) *australiensis* (Girault, 1913), *Brasema leersiae* Risbec, 1956 n. syn. of *Eupelmus* (*Episolindelia*) *testaceiventris* (Motschulsky, 1863), *Bruchocida batataephila* Risbec, 1951 n. syn. of *Eupelmus* (*Eupelmus*) *elongatus* Risbec, 1851, and *Macreupelmus australis* Risbec, 1952 n. syn. of *Eupelmus* (*Eupelmus*) *fissicollis* Risbec, 1952. Specific status is proposed for *Anastatus pseudocreobotrae* Risbec, 1951 n. stat., *Eupelmus* (*Macroneura*) *psychophagus* Risbec, 1951 n. stat., *Neanastatus bicolor* Risbec, 1951 and *Neanastatus platygasteri* Risbec, 1956 n. stat., all described originally as varieties. *Vignalia halyomorphae* Risbec, 1951 is removed from synonymy under *Anastatus nezarae* Risbec, 1951 as *Anastatus* (*Anastatus*) *halyomorphae* (Risbec, 1951) rev. stat. and n. comb.

## KEY WORDS

Parasitoid wasps,  
Afrotropical,  
type specimens,  
taxonomy,  
nomenclature,  
new lectotypes,  
new combinations,  
new synonyms,  
new status.

## RÉSUMÉ

*Révision des Eupelmidae Walker, 1833 décrits par Jean Risbec. Partie 1: spécimens montés entre lame et lamelle conservés au Muséum national d'Histoire naturelle, Paris.*

Ce catalogue répertorie les spécimens de la collection Jean Risbec appartenant, ou décrits à l'origine, dans les Eupelmidae Walker, 1833; ils sont généralement montés entre lame et lamelle ou ont été extraits de ces lames et remontés sur paillettes. Des lectotypes sont désignés pour 19 espèces. Onze nouvelles combinaisons sont proposées. Le genre *Fanamokala* Risbec, 1960 décrit dans les Pteromalidae Dalman, 1820 est mis en synonymie avec *Eupelmus* Dalman, 1820; il appartient au sous-genre *Episolindevia* Girault, 1914. Sept synonymies du niveau espèce ou sous-espèce sont établies: *Anastatus aliberti* var. *bruniptera* Risbec, 1951, *Anastatus nezarae* Risbec, 1951, et *Anastatus rhynchitidi* Risbec, 1951 avec *Anastatus* (*Anastatus*) *aliberti* Risbec, 1951, *Brasema leersiae* var. *garouae* Risbec, 1955 avec *Eupelmus* (*Episolindevia*) *australiensis* (Girault, 1913), *Brasema leersiae* Risbec, 1956 avec *Eupelmus* (*Episolindevia*) *testaceiventris* (Motschulsky, 1863), *Bruchocida batataephila* Risbec, 1951 avec *Eupelmus* (*Eupelmus*) *elongatus* Risbec, 1951, et *Macreupelmus australis* Risbec, 1952 avec *Eupelmus* (*Eupelmus*) *fissicollis* Risbec, 1952. *Anastatus pseudocreobotrae* Risbec, 1951 n. stat. *Eupelmus* (*Macroneura*) *psychophagus* Risbec, 1951 n. stat., *Neonastatus bicolor* Risbec, 1951 n. stat. et *Neonastatus platygasteri* Risbec, 1956 n. stat., décrites comme des variétés, sont élevées au rang d'espèce. *Vignalia halyomorphae* Risbec, 1951 n'est pas synonyme d'*Anastatus nezarae* Risbec, 1951 et est rétabli comme espèce valide: *Anastatus* (*Anastatus*) *halyomorphae* (Risbec, 1951) rev. stat. et n. comb.

## MOTS CLÉS

Hyménoptères  
parasitoïdes,  
Afrotropical,  
types,  
taxonomie,  
nomenclature,  
lectotypes nouveaux,  
combinaisons nouvelles,  
synonymes nouveaux,  
status nouveaux.

## INTRODUCTION

Eupelmidae Walker, 1833 is a cosmopolitan family in the superfamily Chalcidoidea Latreille, 1817 (Hymenoptera), with more than 970 currently recognized species classified in 45 extant genera and three subfamilies (Noyes 2014). All species with known biologies are idiobiont parasitoids and many of them are polyphagous (Gibson 2006). For example, species of *Calosota* Curtis, 1836 and *Eusandalum* Ratzeburg, 1852 are mostly reported as ectoparasitoids of xylophagous coleopteran larvae (Gibson 1989); species of *Eupelmus* Dalman, 1820 are typically primary or secondary ectoparasitoids of the larvae and pupae of various holometabolous insects in concealed situations (Gibson 2011); and most *Anastatus* Motschulsky, 1859 species are primary egg parasitoids of a wide variety of insect orders and rarely act also as hyperparasitoids (Gibson et al. 2012). However, *Anastatus viridiceps* Waterston, 1915 is a parasitoid of tsetse fly pupae (*Glossina morsitans* Westwood, 1851, Diptera, Glossinidae) (Waterston 1915) and *Anastatus dipterae* (Risbec, 1955) is presumably associated with unknown Diptera puparia (Risbec 1955). *Calymmochilus longbottomi* Gibson, 1998 is the only known chalcid wasp to parasitize pseudoscorpions (Austin et al. 1998), whereas *Calymmochilus dispar* Bouček & Andriescu, 1967 feeds on spider juveniles inside the cocoon (Korenko et al. 2013). Species of the nominal subgenus *Arachnophaga* Ashmead, 1896, as their name suggests, are mostly also predators of eggs in spider egg sacks (Gibson 1995).

The Hymenoptera collection of the Muséum national d'Histoire naturelle, Paris, holds the vast majority of the type material of Eupelmidae, as well as those of other Chalcidoidea species, described by the late Dr Jean Risbec (1895-1964).

Although Risbec is responsible for naming a significant proportion of Afrotropical chalcid wasp species, thus greatly contributing to the biodiversity inventory of this region, his publications and collection are likewise an impediment in the taxonomy of African Chalcidoidea. His descriptions are usually insufficiently accurate and his drawings too schematic to correctly identify his species, though many of his species obviously were described in the wrong genus. Risbec never designated a holotype for the species he described and the taxonomic status of many names appearing on his labels is unclear because he changed the name in the publication while retaining the manuscript name on the specimens. However, data in the original description concerning the host, associated plant species, collection and rearing dates, and locality usually are sufficient to recognize the type specimens. Biographical details of Risbec's life and the history of his types are published elsewhere (Vayssière 1980; Lhoste 1987; Noyes & Prinsloo 1998; Jolivet 2007). Comprehensive publications concerning the species described by J. Risbec and his types are Viggiani (1969) for the Trichogrammatidae Haliday, 1851, Bouček (1976a) and Mitroiu (2011, 2015) for the Pteromalidae Dalman, 1820, Bouček (1976b) for several families of Chalcidoidea, Delvare (1988), Gates & Delvare (2008) for the Eurytomidae Walker, 1832, Grissell (1995) for the Torymidae Walker, 1833, and Noyes & Prinsloo (1998) for the Encyrtidae Walker, 1837.

The present contribution represents a catalogue of the J. Risbec slide-mounted Eupelmidae collection housed at the Muséum national d'Histoire naturelle in Paris, including specimens subsequently mounted from slides by previous authors. Included are all taxa described by Risbec in Eupelmidae or belonging to Eupelmidae, even if originally described in another family.



## MATERIAL AND METHODS

The collection of J. Risbec was historically divided in two parts with the majority of the material deposited at Office de la Recherche scientifique et technique d'Outre-Mer (ORSTOM) at Bondy in Paris eastern suburb (presently IRD). This collection was transferred to Paris in the 1970's (Noyes & Prinsloo 1998) but it is kept separately from the collection acquired by MNHN earlier. To avoid repetitions, the slides are here named with institution code followed by box number and slide number, separated by a full stop. Hence slide MNHN.4.61 would mean that the slide belongs to the MNHN collection and is housed in box number four at rank 61.

Jean Risbec had a very peculiar manner of slide mounting specimens. Usually the specimens are dry mounted without dissection between a glass slide and a coverslip, with the latter sealed on the sides with beeswax or paraffin wax (Figs 1A, B; 2D) or more rarely with Canada balsam (Fig. 1C). This mounting method was apparently preferred because Risbec used to dismantle the preparation in order to reexamine the specimen under various angles, with the admitted risk of damaging or losing the specimen (Risbec 1950b: 513). Only in a few instances the specimens are actually mounted in Canada balsam but without being previously cleared (Fig. 2A, E), or sometimes they are partly in balsam and partly dry, probably due to an accident when sealing the coverslip (Fig. 2C, F). On rare occasions the specimens were mounted on thin wooden strips having the shape and size of a microscope slide and a circular hole to hold the specimen; specimens are dry mounted with two coverslips attached with wax on both sides of the wooden piece (Fig. 1D) or in one instance the specimen is mounted in balsam (Fig. 2B). In the case of a few specimens, perhaps considered not very important, they are mounted on recycled cardboard "slides" (Fig. 1E). Slide mounted parts of specimens, such as male genitalia, antenna or mandible – a common practice for those who study chalcid wasps – are very rare in Risbec's collection (Fig. 1G).

According to the labels on the specimens, previous work on the collection was undertaken by J.-H. Hedqvist in 1965 and 1969, by Z. Bouček in 1976, and G. A. P. Gibson in 1991. The original slides from which the material was remounted by J.-H. Hedqvist are missing, and sometimes the labels were apparently detached from the original slides and used to label the remounted material. Z. Bouček did not remount any specimens while G. A. P. Gibson carefully relabeled the remounted material and the original slides were preserved in all instances. Findings by these authors are the main references for the Eupelmidae species described by J. Risbec (Hedqvist 1970; Bouček 1976b; Gibson 1995).

Beside this slide collection, several more types of Eupelmidae species described by J. Risbec are preserved in the general Hymenoptera collection of MNHN, this being mostly minuten-pin mounted material collected by A. Seyrig in Madagascar. Because this material is much more accessible to research, its cataloguing is less pressing and is not treated here, but a second catalogue concerning this material is currently in preparation. A few other type specimens of J. Risbec are housed in the Royal Museum

for Central Africa in Tervuren, but of these, only the material belonging to Pteromalidae (Mitroiu 2011) and one species of Encyrtidae (Subba Rao 1972) has been critically reanalyzed after the publication of the original descriptions by Risbec (1957b).

Almost 1660 slides were examined, and among them 144 slides were found to be connected to Eupelmidae. Within the catalogue, names as originally published are arranged alphabetically. The data on the labels are presented for each slide, with a slash (/) distinguishing data on separate rows of the same label and a semicolon distinguishing data on separate labels or separate areas of text on different parts of the slide. When there was a slash on the original label it is replaced with an n-dash. The data are presented without any corrections and text in square brackets indicates comments by the authors. As part of the curatorial process all the specimens were labeled with red printed labels according to their type status (holotype, lectotype, paralectotype or syntype), but for brevity we mention only the original labels and omit this one. For the lectotypes designated in this publication all the labels are mentioned. In the case of lectotype designations from specimens still mounted on slides, and if several specimens of the same sex were present under one coverslip, the lectotype was marked with black ink in order to avoid any possible confusion.

Because most specimens in the collection are usually slightly pressed between the slide and the coverslip they are held in place and thus are relatively well preserved. In most instances it was not considered necessary to remount the type material on cards as we feel that the specimens remain much better protected over the long term as originally mounted by Risbec, although they are sometimes difficult to examine.

For the stability of nomenclature, lectotypes were designated in the following cases: when the type series contains more than one species but only one of them agrees with the original description, when the lectotype was selected by previous persons studying the group but not validated through publication or when there is an immediate taxonomic interest for a given group.

## ABBREVIATIONS AND ACRONYMS

### Technical terms

fl1-fl8	first to eighth flagellomere;
Mt7	seventh metasomal tergite;
ω	an abbreviation on Risbec's labels (Figs 1A, B, E; 2D) standing for egg or eggs that might derive from the ancient Greek word <i>ὄον</i> (oion, egg); alternatively it could be the <i>œ</i> grapheme from the French word <i>œuf</i> (egg), etymologically linked with the Greek word.

### Institutions

Coll. AICF	Lucian Fusu collection, Al. I. Cuza University, Iași;
BMNH	The Natural History Museum, London;
CNC	Canadian National Collection of Insects, Arachnids and Nematodes, Agriculture & Agri-Food Canada, Ottawa, ON;
MNHN	Muséum national d'Histoire naturelle, Paris;
ORSTOM	Office de Recherche scientifique et technique d'Outre-Mer (currently Institut de Recherche pour le développement, IRD).

## EUPELMIDAE SLIDE COLLECTION CATALOGUE

### *Anastatoidea pennisetæ* Risbec, 1958

*Anastatoidea pennisetæ* Risbec, 1958: 109-112. Original description, ♀ ♂, Madagascar, Majunga.

CURRENT TAXONOMIC STATUS. — *Eupelmus* (*Episolinella*) *pennisetæ* (Risbec, 1958) n. comb.

TYPE MATERIAL. — MNHN.4.61. Three ♀ and two ♂ syntypes, dry mounted under two coverslips, all damaged to various degrees, labeled in Risbec's handwriting: "G253. galles/ fleurs *Pennisetum*/ *polystachyum*/ Majunga; *Anastatoideal pennisetæ*/ Risbec/ G.253".

#### REMARKS

The first coverslip covers three ♀ and one ♂. One female has the head still attached, with only one antenna lost, and could be selected as lectotype after remounting if necessary. The other two females are crushed, with the heads broken off, but are conspecific with the first female. The male is very damaged. The second coverslip covers one ♂, completely crushed under it. This is a species from the *Eupelmus australiensis* species-group, with a long and uniformly dark ovipositor.

### *Anastatus aliberti* Risbec, 1951

*Anastatus Aliberti* Risbec, 1951a: 197-200. Original description, ♀, Ivory Coast, Abengourou.

*Anastatus aliberti* – Risbec 1955: 218-219 (senior synonym of *Paravignalia hemipterae* Risbec, 1951). — Hedqvist 1970: 430-431 (catalogued). — Herting 1971: 90, 95, 97, 103 (catalogued). — Bouček 1976b: 349 (invalid lectotype designation, ICZN Art. 74.5).

CURRENT TAXONOMIC STATUS. — *Anastatus* (*Anastatus*) *aliberti* Risbec, 1951 n. stat. [new subgeneric status].

TYPE MATERIAL. — MNHN.14.22. Lectotype ♀ (here designated), one ♀ paralectotype, and one ♂ not designated as paralectotype, all dry mounted under one coverslip, labeled in Risbec's handwriting: "ex ω *Homoeocerus*/ Abengourou/ Alibert/ 604/ *Anastatus Aliberti* Risbec" and "LECTOTYPE/ one ♀ designated/ by Boucek/ (1976, p. 349/ (Gibson, 1991)".

MNHN, ex. coll. ORSTOM.2.5. Two ♀ paralectotypes, dry mounted under one coverslip, in good condition, labeled in Risbec's handwriting: "*Anastatus*/ *aliberti*. v. *bruniptera* [in a different ink]/ Risbec/ ex ponte punaise/ cacaoyer/ XXX Abengourou/ F Dagatiguy".

OTHER MATERIAL. — MNHN, ex. coll. ORSTOM.2.2. Slide labeled in Risbec's handwriting: "*Anastatus*/ *Aliberti*. Risbec/ ex ω *Homoeocerus*/ s- cacaoyer./ Abengourou/ H. Alibert" [see under *Paravignalia hemipterae*].

MNHN, ex. coll. ORSTOM.2.3. Slide labeled in Risbec's handwriting: "*Anastatus*/ (*Paravignalia*)/ *hemipterae* [overwritten in a different ink by:] *Aliberti* Risbec/ ex ω. Reduvidae [sic]/ Bambey/ Risbec" [see under *Paravignalia hemipterae*].

MNHN, ex. coll. ORSTOM.2.4. Slide labeled in Risbec's handwriting: "*Anastatus Aliberti* Risbec/ ♂./ ex ω *Hoteal subfasciata*./ Garoua I. 55/ Descamps. 223" [see under *Paravignalia hemipterae*].

#### REMARKS

The lectotype was selected by Bouček (1976b) from one of the two specimen on slide MNHN.14.22. Unfortunately Bouček (1976b) didn't provide any character by which the female he selected as lectotype could be distinguished from the second one, so it was not unambiguously selected. Therefore, his designation is not valid according to ICZN Art. 74.5, and the female in the middle of slide MNHN.14.22 is here designated as lectotype of *Anastatus aliberti*. The lectotype female is not contorted, is entire except for missing fl8 and the clava of the left antenna, has the wings folded on the dorsum, and both eyes are collapsed. The paralectotype female has the right antenna broken off beyond fl1, both fore wings are in an upward position and with the apices folded, and only the left eye is collapsed.

Besides the two females, slide MNHN.14.22 contains one male mentioned also by Risbec (1955). The male has the antenna with a very long clava and short, transverse flagellomeres (second type of antennal structure described by Gibson [1995]). One antenna is broken off but there is a clava glued with Canada balsam next to the coverslip. The head and mesosoma are mostly dark green, with intense blue and purple luster on the mesopleura and hind coxa. The fore femur is darkened with metallic luster on the outer surface and the fore tibia is yellow, the mid femur is dark and the mid tibia slightly darkened distally, and the hind femur and tibia are entirely darkened; all tarsi have yellowish basal segments, progressively darkened toward the last tarsomere. This short description is provided because this male could be the other sex of *A. aliberti*, described from females, and because *Paravignalia hemipterae* Risbec, 1951, described from males, was placed in synonymy with *A. aliberti* by Risbec (1955) and this was followed by Hedqvist (1970). Specimens on slides ORSTOM.2.2 to 2.4, although labeled as *Anastatus aliberti*, contain type material belonging to *Paravignalia hemipterae* Risbec, 1951 and are treated below under this name.

Slide ORSTOM.2.5 contains two *Anastatus* female specimens similar with those on slide MNHN.14.22. Although labeled as *aliberti* v. *bruniptera*, this seems to be a later addition to the label, so they actually are the last two syntypes mentioned in the original description of *A. aliberti* (reared from eggs on cacao tree).

### *Anastatus aliberti* var. *bruniptera* Risbec, 1951

*Anastatus Aliberti* var. *bruniptera* Risbec, 1951a: 200. Original description, ♀, Ivory Coast, Abengourou.

*Anastatus bruniptera* – Risbec 1951a: 251, 252 (as cited in index).

*Anastatus aliberti* var. *bruniptera* – Risbec 1951b: 1112 (biology). — Hedqvist 1970: 431 (catalogued).

CURRENT TAXONOMIC STATUS. — Synonym of *Anastatus* (*Anastatus*) *aliberti* Risbec, 1951 n. syn.

TYPE MATERIAL. — MNHN.14.23. Five ♀ syntypes, dry mounted under one coverslip, in good condition except one with head detached, labeled in Risbec's handwriting: "323c. Dagatiguy/ ex ponte s- cacao./ Abengourou/ *Anastatus Aliberti*/ Risbec/ var. *bruniptera*/ Risbec".





FIG. 1. — **A**, slide MNHN.14.27, dry mounted specimens with coverslip sealed with wax, *Anastatus gratidia* Risbec, 1951, lectotype and paralectotype; **B**, slide ORSTOM.2.2, dry mounted specimen with coverslip sealed with paraffin wax, *Paravignalia hemipterae* Risbec, 1951, lectotype; **C**, slide ORSTOM.2.24, dry mounted specimen with coverslip sealed with Canada balsam, *Bruchocida batataephila* Risbec, 1951, paralectotype; **D**, slide MNHN.14.71, dry mounted specimen on a wooden strip with coverslip sealed with wax, *Polymoria curculionis* Risbec, 1951, paralectotype; **E**, MNHN.14.18, dry mounted specimens in a cardboard slide, *Mesomys* sp.; **F**, label in Risbec's handwriting, BMNH collections, *Eupelmus psychephagus* Risbec, 1951; **G**, slide MNHN.1.74, dry mounted antenna, *Eusandalum striatum* Risbec, 1952, holotype; **H**, labels of the paralectotype of *Calosoter versicolor* Risbec, 1951, BMNH collection (Photo Natalie Dale-Skey Papilloud).



NON TYPE MATERIAL. — MNHN.14.24. Eight headless females and two heads dry mounted under one coverslip plus four parasitized eggs glued to the slide with Canada balsam, labeled in Risbec's handwriting: "*Anastatus Aliberti bruniptera* Risbec/ 588c Abengourou/ Dagatiguy".

OTHER MATERIAL. — MNHN, ex. coll. ORSTOM.2.5. Slide labeled in Risbec's handwriting: "*Anastatus/ aliberti. v. bruniptera* [in a different ink]/ Risbec/ ex ponte punaise/ cacaoyer/ XXX Abengourou/ F Dagatiguy" [see Remarks under *Anastatus aliberti*].

#### REMARKS

This taxon was described as a variety ("variété" and "n.v.") of *Anastatus aliberti* (Risbec 1951a) and on subsequent pages listed in an index as "*Anastatus bruniptera* n. sp., n. var." (p. 251) or simply as *Anastatus bruniptera* (p. 252) (see Remarks under *Neanastatus tenuis* var. *bicolor*). Risbec (1951b) published again "*Anastatus aliberti bruniptera* n. v." but without description.

Slide MNHN.14.23 contains five female syntypes. The five females are clearly conspecific, so at the moment there is no need for a lectotype designation; they are conspecific with the lectotype of *A. aliberti*. The specimens on slide MNHN.14.24 are most likely the eight specimens mentioned by Risbec (1951b) later, in the first addition to his 1951 monograph and if so, they are not part of the original type series.

#### *Anastatus apantelesi* Risbec, 1951

*Anastatus apantelesi* Risbec, 1951a: 192-194. Original description, ♀, Senegal, Bambey; 1950a: 59 (*nomen nudum*); 1958: 104 (misidentification); 1960a: 648 (catalogued). — Hedqvist 1970: 431 (catalogued).

*Anastatus apantelis* – Herting 1976: 180 (misspelling).

CURRENT TAXONOMIC STATUS. — *Anastatus* (*Anastatus*) *apantelesi* Risbec, 1951 n. stat. [new subgeneric status].

TYPE MATERIAL. — General collection. Lectotype ♀ (here designated), card mounted: "M. Bambey/ s- salades II.49/ remounted from sl. 18/ Fusu L. 21.III.2011; Lectotype [red label]; LECTOTYPE/ *Anastatus/ apantelesi* Risbec/ Det. Fusu L. 2011".

MNHN.14.18. Original slide of the lectotype, labeled in Risbec's handwriting: "M'Bambey/ s- salade./ an[?] II.49./ *Anastatus/ apantelesi/* Risbec" and "Lectotype [red label]; LECTOTYPE/ *Anastatus/ apantelesi* Risb./ Det. Fusu L. 2011; remounted/ by L. Fusu, 21.III.2011".

MNHN, ex. coll. ORSTOM.2.6. One ♀ paralectotype, dry mounted, with head and right antenna detached and the mesosoma crushed under the coverslip, labeled in Risbec's handwriting: "*Anastatus/ apantelesi. Risbec/ ex Apanteles/ risbeci./* Bambay".

NON TYPE MATERIAL. — MNHN.4.60. One dry mounted, brachypterous *Anastatus* female, labeled in Risbec's handwriting: "*Anastatus/ apantelesi/* Risbec" and "Elév. du 12.5.52. No 1090. eclos. 25.7.52/ Inst Scient. Madagascar/ Parasites des pontes d'orthoptères/ (Phasgounuridae [sic]) sur feuille de Soviara/ (Legumineuse) Beravina. Dist Morafénobé/ (A. R.)".

MNHN, ex. coll. ORSTOM.2.7. Three dry mounted *Anastatus* females, labeled in Risbec's handwriting: "*Anastatus/ apantelesi* Risbec/ ex ω. *Homoeocerul pallens* et *yerburyil* Garoua 3-54 Descamps".

#### REMARKS

Risbec described this species based on three females: one reared from an *Apanteles* Förster, 1862 cocoon (Hymenoptera, Braconidae), one collected from salad leaves, and one he obtained from eggs of *Charaxes epijasius* Reiche, 1850 (Lepidoptera, Nymphalidae). The specimen on slide MNHN.14.18, collected on salad, was remounted and labeled by LF, and is here designated as lectotype. It is uncontracted, with the right fore leg missing and the left eye collapsed. Labels on slides ORSTOM.2.7 and MNHN.4.60 differ from those given in the original description and thus specimens on these slides are not designated as paralectotypes.

#### *Anastatus apantelesi* var. *nezarae* Risbec, 1951

*Anastatus apantelesi* var. *nezarae* Risbec, 1951a: 194-195. Original description, ♀, Senegal, Bambey; 1950a: 211, 401, 412 (*nomen nudum*); 1960a: 647, 655 (catalogued). — Hedqvist 1970: 431 (catalogued).

*Anastatus nezarae* – Risbec 1951a: 251-252 (as cited in index); 1955: 218 (new status). — Herting 1971: 88, 90, 95, 97 (catalogued). — Nonveiller 1984: 122 (catalogued).

CURRENT TAXONOMIC STATUS. — Synonym of *Anastatus apantelesi* Risbec, 1951 n. syn.

TYPE MATERIAL. — MNHN.14.28. Two ♀ syntypes, mounted directly in balsam, collapsed due to air drying, with most of the antennae and legs missing, labeled in Risbec's handwriting: "*Anastatus/ nezarae* n. var/ de *A. apantelesi* ex ω *Nezara/ prunasis* Dal./ Bambey".

NON TYPE MATERIAL. — MNHN, ex. coll. ORSTOM.2.15. Ten broken females of *A. apantelesi* and one male with a very long clava, dry mounted under one coverslip, labeled in Risbec's handwriting: "*Anastatus/ nezarae* Risbec/ ex ω Pentatomidae/ Garoua. Descamps/ 5.54".

#### REMARKS

The two female syntypes are not in good condition, as also noted by Risbec ("en mauvais état") (Risbec 1951a). The specimens on slide ORSTOM.2.15 are not syntypes as only the two females on slide MNHN.14.28 were mentioned in the original description. Risbec (1951a) introduced the name as a variety of *A. apantelesi* (but spelled "Variété *A. nezarae*, n. var."), and in the following pages (251-252) he listed *Anastatus nezarae* as a species, but accompanied sometimes by "n. sp., n. var." (see Remarks under *Neanastatus tenuis* var. *bicolor*). In a later publication he used again *Anastatus nezarae* as a species name (Risbec 1955).

After examining the two fragmentary syntypes of *Anastatus nezarae*, it appears that the name is synonym of *A. apantelesi* Risbec.

#### *Anastatus apantelesi* var. *pseudocrobotrae* Risbec, 1951

*Anastatus apantelesi* var. *pseudocrobotrae* Risbec, 1951a: 195. Original description, ♀, Senegal, Saint-Louis; 1949: 602 (*nomen nudum*); 1950a: 451 (*nomen nudum*). — Hedqvist 1970: 431 (catalogued).

*Anastatus pseudocrobotrae* Risbec, 1951a: 251-252 (as cited in index).



CURRENT TAXONOMIC STATUS. — *Anastatus* (*Anastatus*) *pseudocreobotrae* Risbec, 1951 n. stat.

TYPE MATERIAL. — MNHN.14.32. Five ♀ syntypes, dry mounted under one coverslip, in good condition, labeled in Risbec's handwriting: "ex ponte/ *Pseudocreobotra*/ 18.9.46. Sor. St Louis/ avec *Podagrion*/ *Anastatus*./ *pseudocreobotrae*".

#### REMARKS

Risbec (1951a) introduced the name *pseudocreobotrae* as a variety of *Anastatus apantelesi* (p. 195), but on pages 251 and 252 he listed it as a species (see Remarks under *Neanastatus tenuis* var. *bicolor*). All five female syntypes are conspecific, but if needed a lectotype could be selected after remounting. They are not conspecific with the lectotype of *Anastatus apantelesi*. They have the scutellum and axillae metallic bluish-green with golden shine, and the sculpture on the scutellum consisting of more or less polygonal cells, being similar to *A. aliberti*. In *Anastatus apantelesi* the scutellum and axillae are brownish, with a very faint metallic luster, and the sculpture on the scutellum consisting of concentrically arranged elongated cells.

#### *Anastatus bekiliensis* Risbec, 1952

*Anastatus bekiliensis* Risbec, 1952: 107-108. Original description, ♀, Madagascar, Bekily. — Hedqvist 1970: 432 (catalogued).

CURRENT TAXONOMIC STATUS. — *Reikosiella* (*Hirticauda*) *bekiliensis* (Risbec, 1952) n. comb.

TYPE MATERIAL. — MNHN.1.72. Two ♀ syntypes, dry mounted under two separate coverslips, heads only, labeled in Risbec's handwriting: "*Anastatus/ bekilyensis/* Risbec/ T [large red letter]; *Anastatus/ bekilyi* [changed by a latter addition to *bekilyensis*] Risbec".

General collection. three ♀ syntypes, heads missing: "Madagascar, Bekily, Reg. sud de l'île; Museum Paris, X.36, A. Seyrig; Type; *Anastatus/ bekilyi* [sic] Risbec [in Risbec's handwriting]" (one ♀). "Madagascar/ Bekily/ reg. sud de l'île; Museum Paris/ IX.38/ A. Seyrig" (two ♀).

#### REMARKS

Slide MNHN.1.72 contains only two female heads, one with the right antenna missing beyond fl2 and the other with the antennae separated from the head. There are also three females in the general collection, all minuten-mounted through the acropleuron and all with the heads missing. One specimen, which additionally lacks its gaster, bears a red type label. Because of the fragmentary state of all the syntypes, no lectotype was selected, but the syntypes appear to be conspecific.

#### *Anastatus bostrychidi* Risbec, 1951 (Fig. 2C, F)

*Anastatus bostrychidi* Risbec, 1951a: 202-204. Original description, ♀, Senegal, Bambey. — Hedqvist 1970: 432 (catalogued).

*Anastatus bostrychidis* – Herting 1973: 16 (misspelling).

CURRENT TAXONOMIC STATUS. — *Anastatus* (*Anastatus*) *bostrychidi* Risbec, 1951 n. stat. [new subgeneric status].

TYPE MATERIAL. — MNHN.14.26. Holotype ♀ (by monotypy), partly in balsam and partly dry mounted, entire, squashed dorso-ventrally, labeled in Risbec's handwriting: "*Anastatus/ bostrychidi* Risb./ ex *Sinoxylon/ ceratoniae*/ Bambey".

#### REMARKS

This species was described from a single female from Bambey.

#### *Anastatus gratidia* Risbec, 1951 (Fig. 1A)

*Anastatus gratidia* Risbec, 1951a: 204-205. Original description, ♀, Senegal, Bambey; 1949: 602, 603 (*nomen nudum*); 1950a: 451 (*nomen nudum*). — Hedqvist 1970: 432 (catalogued).

CURRENT TAXONOMIC STATUS. — *Anastatus* (*Anastatus*) *gratidia* Risbec, 1951 n. stat. [new subgeneric status].

TYPE MATERIAL. — MNHN.14.27. Lectotype ♀ (here designated) marked on the coverslip with an arrow and one ♀ paralectotype, both dry mounted and crushed under the coverslip, labeled in Risbec's handwriting: "*Anastatus gratidia/* Risbec/ ex ω. Phasmidae/ 11.1.1944/ Bambey." and "Paralectotype; Lectotype [red labels]; LECTOTYPE/ *Anastatus/ gratidia* Risbec/ Det. Fusu L. 2011". MNHN, ex. coll. ORSTOM.2.14. One ♀ paralectotype, dry mounted, slightly crushed under coverslip, labeled in Risbec's handwriting: "*Anastatus/ gratidia* Risbec/ sur salades/ Bambey".

#### REMARKS

The uncontorted female on slide MNHN.14.27 is designated as lectotype. The female on slide ORSTOM.2.14, although mentioned by Risbec (1951a), does not fit the original description and seems to be a female of *A. apantelesi*.

#### *Anastatus phonoctoni* Risbec, 1955

*Anastatus phonoctoni* Risbec, 1955: 219-224. Original description, ♀ ♂, Cameroon, Garoua. — Hedqvist 1970: 432 (catalogued). — Nonveiller 1984: 122 (catalogued).

CURRENT TAXONOMIC STATUS. — *Anastatus* (*Anastatus*) *phonoctoni* Risbec, 1955 n. stat. [new subgeneric status].

TYPE MATERIAL. — MNHN, ex. coll. ORSTOM.2.16. Lectotype ♀ (here designated) and one ♂ paralectotype, both dry mounted under one coverslip, in good condition, labeled in Risbec's handwriting: "*Anastatus phonoctoni/* Risb/ ex *Phonoctonus/ lutescens/* Garoua/ Descamps 48-49" and "Lectotype; Paralectotype [red labels]; LECTOTYPE ♀/ *Anastatus/ phonoctoni* Risbec/ Det. Fusu L. 2011".

#### REMARKS

According to the original description, three females and one male were obtained from eggs of *Phonoctonus lutescens* (Guérin-Méneville & Percheron, 1834) (Hemiptera, Reduviidae), but only one female and one male on one slide were found. The female is entire, uncontorted, with the right eye fissured along the long axis and is here designated as the lectotype.

### *Anastatus rhynchitidi* Risbec, 1951

*Anastatus rhynchitidi* Risbec, 1951a: 200-202. Original description, ♀, Ivory Coast, Abengourou. — Hedqvist 1970: 432 (catalogued).

CURRENT TAXONOMIC STATUS. — Synonym of *Anastatus aliberti* Risbec, 1951 n. syn.

TYPE MATERIAL. — MNHN.14.25. Holotype ♀ (by monotypy), dry mounted, in good condition, labeled in Risbec's handwriting: "*Anastatus/ rhynchitidi* Risbec/ ex larve *Rhynchitel* Alibert 737/ Abengourou".

#### REMARKS

The holotype is in good condition, except the right antenna broken from the pedicel. Comparison with the lectotype of *A. aliberti* showed that *A. rhynchitidi* is a larger specimen of the former species.

### *Anastatus waneii* Risbec, 1951

*Anastatus Waneii* Risbec, 1951a: 195-197. Original description, ♀, Senegal, Bambey.

*Anastatus waneii* — Hedqvist 1970: 432 (catalogued). — Bouček 1976b: 350 (lectotype designation, synonym of *Anastatus tenuipes* Bolivar y Pielain, 1925).

CURRENT TAXONOMIC STATUS. — Synonym of *Anastatus (Anastatus) tenuipes* Bolivar y Pielain, 1925.

TYPE MATERIAL. — MNHN.14.20. Lectotype ♀, dry mounted, strongly contorted but entire, labeled in Risbec's handwriting: "N°69 Bambey./ Eupelmidae/ *Anastatus/ Waneii* Risbec/ 21-6-47" and in Gibson's handwriting "LECTOTYPE/ *Anastatus/ Waneii* Risbec/ (Boucek, 1976)". MNHN.14.19. Three ♀ paralectotypes, one dry mounted under one coverslip and two others mounted in balsam under a second one, in good condition, labeled in Risbec's handwriting: "*Solindenial* n. etud. [crossed off]/ *Anastatus Waneii* Risbec/ Bambey/ VI-72" and in Gibson's handwriting "PARALECTOTYPE/ *Anastatus/ Waneii* Risbec/ (Boucek, 1976)".

MNHN.14.21. One ♀ paralectotype, dry mounted, in perfect condition and unlike the lectotype not contorted, labeled in Risbec's handwriting: "Eupelmidae/ Bambey. 22.3.47/ *Anastatus Waneii*./ Risbec" and in Gibson's handwriting "PARALECTOTYPE/ *Anastatus/ Waneii* Risbec/ (Boucek, 1976)".

MNHN, ex. coll. ORSTOM.2.17. Two ♀ paralectotypes, dry mounted under a coverslip, in good condition, labeled in Risbec's handwriting: "W. 84. 19.7.47/ Bambey./ Eupelmidae/ *Anastatus/ Waneii*. Risbec." and in Gibson's handwriting "PARALECTOTYPE/ *Anastatus/ Waneii* Risbec/ (Boucek, 1976)".

#### REMARKS

The lectotype was designated by Bouček (1976b). He proposed *A. waneii* was the same species as *A. tenuipes* and this synonymy is supported here.

### *Brasema alasorae* Risbec, 1956

*Brasema alasorae* Risbec, 1956a: 130. Original description, ♀, Madagascar, reared from galls on the stalk of *Helichrysum bojerianum*; 1958: 99-102 (subsequent description, description of the male). — Hedqvist 1970: 433 (catalogued).

CURRENT TAXONOMIC STATUS. — *Eupelmus (Eupelmus) alasorae* (Risbec, 1956) n. comb.

TYPE MATERIAL. — MNHN.4.55. Lectotype ♀ (here designated), dry mounted, in good condition; on the same slide there is another coverslip, but with the wax sealing damaged on one side and without any specimen, labeled in Risbec's handwriting: "G 122/ *Brasemal alasorae* Risbec" and "Lectotype [red label]; LECTOTYPE/ *Brasemal alasorae* Risbec 1956/ Det. Fusu L. 2011".

#### REMARKS

Risbec (1956a) made the name *Brasema alasorae* available by including the female in a key, but he didn't specify the number of specimens or exact locality data, except that the species was from Madagascar and that it was reared from galls on the stalk of *Helichrysum bojerianum* DC. He also stated that "La clé d'identification tient compte également de trois espèces malgaches dont les descriptions ne pourront être publiées très prochainement et dont les diagnoses provisoires seront ainsi publiées". Consequently, Risbec described *Brasema alasorae* as a new species again in 1958 and the description was based on a male and a female from slide N° G.122 [MNHN.4.55]. For *Brasema alasorae* as well as for *B. andropogonae* Risbec, 1956 and *B. fantsiliae* Risbec, 1956, we consider the 1958 publication as a subsequent description and not as a description of a new species, because of Risbec's 1956 statement reproduced above. The male of *B. alasorae* mentioned in 1958 is probably lost (see above under type material), and the sole present female on slide MNHN.4.55 is here designated as lectotype.

### *Brasema andropogonae* Risbec, 1956

*Brasema andropogonae* Risbec, 1956a: 130. Original description, ♀, Madagascar, reared from galls of *Andropogona madagascariensis*; 1958: 97-99 (subsequent description, lectotype designation, ICZN Art. 74.6). — Hedqvist 1970: 433 (catalogued).

CURRENT TAXONOMIC STATUS. — *Eupelmus (Episilindelia) andropogonae* (Risbec, 1956) n. comb.

TYPE MATERIAL. — MNHN.4.51. Lectotype ♀, dry mounted, labeled in Risbec's handwriting: "*Brasemal andropogonae* Risbec" and "Elev. du 27.3.51. N° G.232. Ecl. le 17.4.51/ Inst Scient. Madagascar/ Parasite de galle par (fasciation) de feuilles/ d'*Andropogon Madagascariensis*/ Fenoarivo – près Tananarive (A.R.; Lectotype [red label]; LECTOTYPE/ *Brasemal andropogonae* Risbec 1956/ Det. Fusu L. 2011".

#### REMARKS

Risbec (1956a) made this name available by including the name in a key, but he did not state the number of specimens examined or exact locality data, except that the species was from Madagascar and that it was reared from galls on the stalk of *Andropogon madagascariensis* Hack. Risbec (1958) provides a subsequent description of *Brasema andropogonae* (see above under Remarks for *Brasema alasorae*). Because he pointed to a single female and quoted the data on slide MNHN.4.51, according to ICZN Article 74.6, this should be regarded as a lectotype designation.



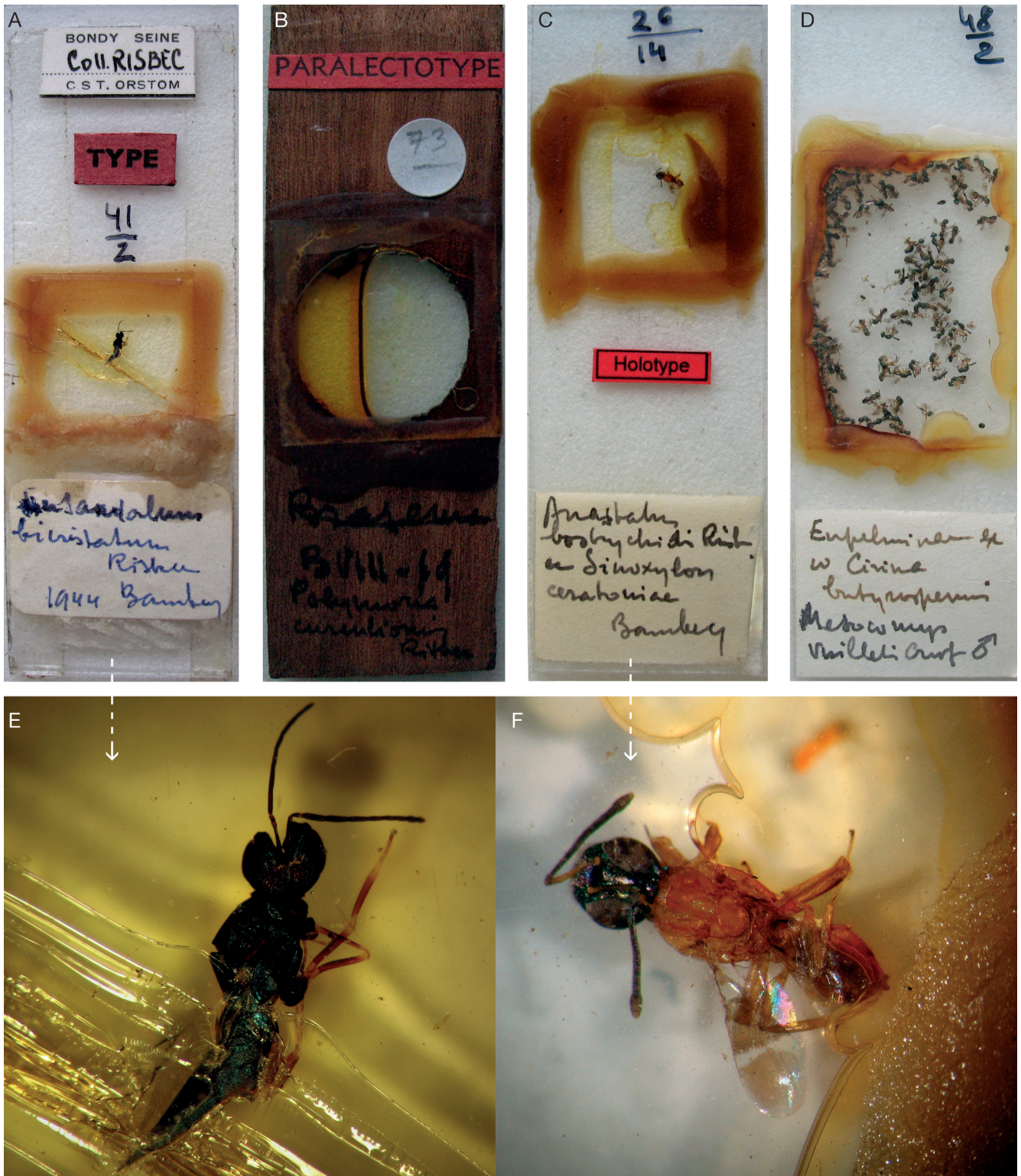


FIG. 2. — **A, E**, Slide ORSTOM.2.41, uncleared specimen mounted in Canada balsam and coverslip sealed with wax, *Eusandalum bicristatum* Risbec, 1951, holotype; **B**, slide MNHN.14.73, specimen mounted in Canada balsam on a wooden strip, *Polymoria curculionis* Risbec, 1951, paralectotype; **C, F**, slide MNHN.14.26, specimen partly mounted in Canada balsam and coverslip sealed with wax, *Anastatus bostrychidi* Risbec, 1951, holotype; **D**, slide ORSTOM.2.48, dry mounted specimens with coverslip sealed with wax, *Mesocormys* sp.



*Brasema brevicollis* Risbec, 1951

*Brasema brevicollis* Risbec, 1951a: 217. Original description, ♀, Senegal, Bambe; 1960a: 643 (catalogued). — Hedqvist 1970: 433 (catalogued).

*Eupelmus brevicollis* – Bouček 1976b: 352 (change of combination).

CURRENT TAXONOMIC STATUS. — *Eupelmus* (*Eupelmus*) *brevicollis* (Risbec, 1951) n. stat. [new subgeneric status].

TYPE MATERIAL. — MNHN.14.50. Holotype ♀ (by monotypy), dry mounted, entire and slightly covered by mold, labeled in Risbec's handwriting: "Parasite ex/ chrysalides s- épi/ mil. Bambe/ (chrys. ci incluse); *Brasema?*/ *orthopterae* [crossed off]/ Risbec/ *brevicollis*".

REMARKS

According to Bouček (1976b), this species belongs to the *urozonus* species-group of *Eupelmus*. It is similar to *E. martellii* Masi, 1941, described from N. Africa, in having the ovipositor about 0.8 times the hind tibia length, a reticulate scrobal depression with smooth scrobes, faintly reticulate frons, mostly bluish-green body with bronze and copper reflections without purple on the pronotal collar, a dark violet scrobal depression, and almost entirely yellowish middle legs, but it differs in having dark admarginal pronotal setae (however this is difficult to confidently appreciate accurately because of the condition of the specimen).

*Brasema fantsiliae* Risbec, 1956

*Brasema fantsiliae* Risbec, 1956a: 130. Original description, ♀, Madagascar, Lac de Vintany (Itampolo), reared from leaf gall of *Didierea mirabilis*; 1958: 102-104 (subsequent description, lectotype designation, ICZN Art. 74.6). — Hedqvist 1970: 433 (catalogued).

CURRENT TAXONOMIC STATUS. — *Eupelmus* (*Episolinodelia*) *fantsiliae* (Risbec, 1956) n. comb.

TYPE MATERIAL. — MNHN.4.58. Lectotype ♀, dry mounted, with the head detached but present under the same coverslip, labeled in Risbec's handwriting: "*Brasema fantsiliae* Risbec" and "Elev. du 19.5.51. N° G.251. Éclos. le 4.6./ Inst Scient. Madagascar/ Parasite de/ galle de feuilles de Fantsilio/ (Euphorbiaceae)/ Lac de Vintany (Itampolo)/ (A.; Lectotype [red label]; LECTOTYPE/ *Brasema fantsiliae* Risbec/1956/ Det. Fusu L. 2011".

REMARKS

Risbec (1956a) made this name available by including it in a key but it is not clear whether the description was based on a single or several specimens. Risbec (1958) provides a subsequent description of *Brasema fantsiliae* (see above under Remarks for *Brasema alasorae*). Because he pointed to a single female and quoted the data on slide MNHN.4.58, according to ICZN Article 74.6, this should be regarded as a lectotype designation.

*Brasema leersiae* Risbec, 1956

*Brasema leersiae* Risbec, 1956a: 129, 130-134. Original description, ♀, Madagascar, Tsimbazaza. — Hedqvist 1970: 433 (catalogued).

CURRENT TAXONOMIC STATUS. — Synonym of *Eupelmus* (*Episolinodelia*) *testaceiventris* (Motschulsky, 1863) n. syn.

TYPE MATERIAL. — MNHN.4.53. Lectotype ♀ (here designated) marked on the coverslip with an arrow and one ♀ paralectotype, both dry mounted under one coverslip: "Elev. du 21.3.51. N° G.217. Éclos. le 2.4.51./ Inst. Scient. Madagascar/ Parasite de galle de feuille d'*Ambora*/ Ambila-Lemaitso (A. R; 1024/ *BRASEME* [sic]/ *LEERSIAE*/ J. Risbec; Lectotype; Paralectotype [red labels]; LECTOTYPE/ *Brasema leersiae* Risbec/ Det. Fusu L. 2011". MNHN.4.45. One ♀ paralectotype, dry mounted, with head missing: "G331/ *Brasema leersiae* Risbec" and "Elev. du 18.3.52. N° 1024. Éclos. le 1.4.52/ Inst Scient. Madagascar/ Parasites des cocons des Dipteres mineurs/ des feuilles de *Mariscus. luteus* (Cyperacées) Tsimbazaza. (A.R.)".

MNHN, ex. coll. ORSTOM.2.19. One ♀ paralectotype, dry mounted, entire but with the wings dirty and damaged: "G 227/ *BRASEME* [sic]/ *LEERSIAE*/ J. RISBEC" and "Elev. du 7.3.51. N° G.227. Éclos. le 12.4.51/ Inst. Scient. Madagascar/ Parasite de galle des feuilles sous forme/ de chou. de Hazopiritika./ Perinet. (A. R)".

MNHN, ex. coll. ORSTOM.2.20. One ♀ paralectotype, dry mounted small specimen, with head and gaster badly collapsed, labeled in Risbec's handwriting: "*Brasema leersiae* Risbec/ sans doute" and "Elev. du 9.2.51. N° G.186. Éclos. le 26.2.51./ Inst. Scient. Madagascar/ Parasite de galle de fleur de *Philippia*. sp./ Mont. Tsaratanana/ (A.R.)".

REMARKS

One male and one female mentioned in the original description were not located. The designated lectotype is the larger, complete female on slide MNHN.4.53, with the wings folded on the dorsum and the gaster and right eye collapsed. It is marked on the coverslip with an arrow. The paralectotype under the same coverslip is a smaller specimen and lacks its head.

*Brasema leersiae* var. *garouae* Risbec, 1955

*Brasema leersiae* var. *garouae* Risbec, 1955: 224. Original description, ♀ ♂, Cameroon, Garoua; 1956b: 245 (catalogued). — Hedqvist 1970: 433 (catalogued). — Nonveiller 1984: 122 (catalogued).

CURRENT TAXONOMIC STATUS. — Synonym of *Eupelmus* (*Episolinodelia*) *australiensis* (Girault, 1913) n. syn.

TYPE MATERIAL. — MNHN, ex. coll. ORSTOM.2.21. Eight ♀ and 16 ♂ syntypes plus one Eulophidae male, all under one coverslip, mostly dry mounted, but five specimens embedded in paraffin, labeled in Risbec's handwriting: "*Brasema leersiae*. v. *garouae* R/ ex larves Cecidomyies/ s- mil. Garoua 9-53/ Descamps".

REMARKS

Risbec (1955) established this name based on 30 ♀ and 15 ♂ as a variety of *Brasema leersiae* Risbec, 1956. The latter name was made available only one year later (Risbec 1956a) and consequently the publication date of the variety precedes that of the species. Because it is a synonym of *Eupelmus australiensis* (Girault, 1913), establishing the correct usage of names and their priority is now irrelevant.



*Brasema orthopterae* Risbec, 1951

*Brasema orthopterae* Risbec, 1951a: 214-217. Original description, ♀ ♂, Senegal, Bambey; 1949: 602 (*nomen nudum*); 1950a: 451 (*nomen nudum*); 1956b: 129 (keyed). — Hedqvist 1970: 433 (catalogued). — Herting 1971: 66-67 (catalogued).

*Holceupelmus bifasciatus* Cameron, 1905: 316-317 (secondary homonym of *Eupelmus bifasciatus* Giraud, 1871). — Smith 1969: 73-75 (figured).

*Eupelmus orthopterae* – Bouček 1976b: 352-353 (change of combination, synonym of *Holceupelmus bifasciatus* Cameron). — Hawkes 1989: 65 (biology).

CURRENT TAXONOMIC STATUS. — *Eupelmus* (*Eupelmus*) *orthopterae* (Risbec, 1951) n. stat. [new subgeneric status].

TYPE MATERIAL. — MNHN.14.48. Lectotype ♀ (here designated), encircled with black ink and marked with an arrow. The slide also contains nine ♀ and four ♂ paralectotypes under two coverslips of which six ♀ and one ♂ dry mounted under the first coverslip, some badly crushed, and four ♀ and three ♂ dry and balsam mounted under the second coverslip, also partly crushed, labeled in Risbec's handwriting: "*Eupelmus* sp./ ex ω *Miomantis pellucida* *Brasema orthopterae* Risbec/ II 92 93" and "Lectotype [red label]; LECTOTYPE/ *Brasema orthopterae* Risb/ Det. Fusu L. 2011".

MNHN.14.47. Seven ♀ and four ♂ paralectotypes under two coverslips of which three ♀ and two ♂ mounted in balsam under the first coverslip and partly crushed, and four ♀ and two ♂ dry mounted under the second coverslip, also partly crushed, labeled in Risbec's handwriting: "*Brasema orthopterae* Risbec/ ex *Miomantis pellucida*".

MNHN.14.49. Two ♀ paralectotypes, not conspecific with the lectotype, dry mounted and partly damaged, labeled in Risbec's handwriting: "aff *Macreupelmus* 13.VIII.24/ *Brasema orthopterae* Risbec".

MNHN, ex. coll. ORSTOM.2.22. Two ♀ and one ♂ paralectotypes of which one ♀ and one ♂ dry mounted under the first coverslip are conspecific with the lectotype, while the female under the second coverslip belongs to another *Eupelmus* species, labeled in Risbec's handwriting: "*Brasema orthopterae* Risbec/ 6.4.44 ex ω/ *Blepharodes soudanensis* [sic]".

## REMARKS

Bouček (1976b) transferred this species to *Eupelmus* and he also established the synonymy with *Holceupelmus bifasciatus* Cameron, 1905. Specimens on slide MNHN.14.49 are probably the two females without host data mentioned in the original description and are clearly different from the lectotype and from paralectotypes on slides MNHN.14.47 and MNHN.14.48. Slide ORSTOM.2.22 contains two ♀ and one ♂, of which one ♀ and one ♂ under the first coverslip are conspecific with the lectotype, while the female under the second coverslip belongs to another *Eupelmus* species, different from that on slide MNHN 14.49. Because the type series of *B. orthopterae* involves three species (only one fitting the original description and Risbec's fig. 127) a female on slide MNHN.14.48 is here designated as lectotype. It is entire, with all relevant characters visible, but the head is slightly detached and the tip of one wing and ovipositor apex are trapped in Canada balsam. Because of the fragility of the specimens it was decided not to remount them.

*Bruchocida batataephila* Risbec, 1951

(Fig. 1C)

*Bruchocida batataephila* Risbec, 1951a: 225-227. Original description, ♀, Senegal, Bambey; 1960a: 627 (catalogued). — Hedqvist 1970: 434 (catalogued). — Herting 1973: 97 (catalogued).

*Eupelmus batataephilus* – Bouček 1976b: 352 (lectotype designation and change of combination).

CURRENT TAXONOMIC STATUS. — Synonym of *Eupelmus* (*Eupelmus*) *elongatus* Risbec, 1951 n. syn.

TYPE MATERIAL. — MNHN.14.60. Lectotype ♀, dry mounted upside down, with the head and mesosoma slightly crushed under the coverslip, labeled in Risbec's handwriting: "*Bruchocidal batataephila* Risbec/ Bambey/ ex *Cylas puncticollis* Boh." and in Gibson's handwriting "LECTOTYPE/ *Bruchocidal batataephila* R./ (Boucek, 1976)".

MNHN.14.59. One ♀ paralectotype, dry mounted, in good condition but with head detached, labeled in Risbec's handwriting: "12.12.46/ Bambey/ *Bruchocidal batataephila* Risbec" and in Gibson's handwriting "PARALECTOTYPE/ *Bruchocidal batataephila* R./ (Boucek, 1976)".

MNHN.14.61. One ♀ paralectotype, dry mounted, entire and slightly contorted, labeled in Risbec's handwriting: "s. patates/ 11.12.46/ Bambey/ *Bruchocidal batataephila* Risbec" and in Gibson's handwriting "PARALECTOTYPE/ *Bruchocidal batataephila* R./ (Boucek, 1976)".

MNHN, ex. coll. ORSTOM.2.24. One ♀ paralectotype, dry mounted, in perfect condition except for the tips of the wings, labeled in Risbec's handwriting: "*Bruchocidal batataephila* Risbec/ Bambey" and in Gibson's handwriting "PARALECTOTYPE/ *Bruchocidal batataephila* R./ (Bouček, 1976)".

## REMARKS

The lectotype was designated by Bouček (1976b) who also transferred the species to *Eupelmus*. This name is synonymous with *Eupelmus elongatus* Risbec, 1951, a name made available on page 208 of the same publication as for *B. batataephila*. Paralectotype on slide MNHN.14.59 is clearly not conspecific with the lectotype, having the ovipositor much shorter than the hind tibia and an almost mirror-like, faintly coriaceous frons.

*Bruchocida vuilleti* Crawford, 1913

*Bruchocida vuilleti* Crawford, 1913: 246. Original description, ♀ ♂, Haut Senegal-Niger (now Mali), Koulikoro.

*Bruchocida vuilleti* – Risbec 1950a: 169, 172, 225, 366; 1951a: 222; 1960a: 627, 628.

IDENTITY. — This species was misidentified by Risbec, all specimens reared from *Piezotrachelus varius* (Wagner, 1908) and *Palaeococcus bicolor* Newstead, 1917 belonging to *Eupelmus orientalis* (Crawford, 1913). A single female on slide MNHN.14.57 reared from *Bruchus ornatus* Boheman, 1829, and possibly also the males on slide MNHN.14.56, belong to *Eupelmus vuilleti* (Crawford, 1913).

SPECIMENS. — MNHN.14.54. Four dry mounted *Eupelmus orientalis* females, labeled in Risbec's handwriting: "ex *Piezotrachelus varius*! *Bruchocidal vuilleti* Crwf.". MNHN.14.55. Two balsam mounted *Eupelmus* males, labeled in Risbec's handwriting: "*Bruchocidal vuilleti* Crwf/ ex *Piezotrachelus varius*. III 54".

MNHN.14.56. Two balsam mounted *Eupelmus* males, labeled in Risbec's handwriting: "*Bruchocidal vuilleti* ex/ *Bruchus ornatus*/ III 53". MNHN.14.57. One balsam mounted *E. vuilleti* female, labeled in Risbec's handwriting: "*Bruchocidal vuilleti* Crwf./ par. *Bruchus ornatus*/ III 52".

MNHN.14.58. One balsam and one dry mounted female under two coverslips, both belonging to *E. orientalis*, labeled in Risbec's handwriting: "*Bruchocidal vuilleti* Crwf/ ex *Palaeococcus bicolor* Newst/ Bambe".

MNHN, ex. coll. ORSTOM.2.25. Two dry mounted *E. orientalis* females, labeled in Risbec's handwriting: "*Bruchocidal vuilleti* Crwf/ ex gousse niebé/ Senegal./ A Wane".

### *Calosoter aristidae* Risbec, 1951

*Calosoter aristidae* Risbec, 1951a: 249-251. Original description, ♀, Senegal, Bambe; 1954a: 527-528 (description of the male).

*Calosota aristidae* – Hedqvist 1970: 419-423, 439 (incorrect lectotype designation, change of combination, redescribed, figured, keyed).

CURRENT TAXONOMIC STATUS. — *Calosota aristidae* (Risbec, 1951).

TYPE MATERIAL. — General collection. Holotype ♀ (by monotypy): "Eupelmidae/ ex galls de *Aristida stipoides*/ II.100; *Calosoter aristidae*/ Risbec [both labels in Risbec's handwriting, detached from the original slide]; Holotype; Lectotypus ♀/ *Calosotal aristidae*/ Risb/ K-J. det. 1965; *Calosota aristidae*".

#### REMARKS

Hedqvist (1970) incorrectly designated the holotype female as lectotype for this species because the description was based on a single female (Risbec 1951a; Risbec 1954a). The slide MNHN.14.76 is missing, the specimen was remounted by Hedqvist and is presently housed in the general collection of the MNHN.

### *Calosoter versicolor* Risbec, 1951

*Calosoter versicolor* Risbec, 1951a: 247-249. Original description, ♀, Senegal, Bambe.

*Calosota versicolor* – Hedqvist 1970: 421-423, 440 (lectotype designation, change of combination, redescribed, figured, keyed).

CURRENT TAXONOMIC STATUS. — *Calosota versicolor* (Risbec, 1951).

TYPE MATERIAL. — General collection. Lectotype ♀: "Bambe. 82/ *Calosoter versicolor* Risbec [label in Risbec's handwriting, detached from the original slide]; Lectotypus ♀/ *Calosotal versicolor*/ Risb/ K-J. Hedqvist det. 1965; *Calosota versicolor*".

#### REMARKS

This species was described from two females. The original slide (MNHN.14.75) is missing as the specimens were remounted by Hedqvist. He reported the presence of two females on one slide (Hedqvist 1970), but there is only one female remounted in the general collection. In BMNH there is a specimen originating from Hedqvist's personal collection labeled as "Africa/ Bambe/ 82/ Risbec". It also has an identification label by Hedqvist: "*Calosotal versicolor*/ Risb./ ♀/ K-J Hedqvist det. 69" (Fig. 1H). This specimen is the missing paralectotype of *Calosoter versicolor* as it has the same collecting data as the lectotype.

### *Cerambycobius mandrakae* Risbec, 1952

(Fig. 3A, C)

*Cerambycobius mandrakae* Risbec, 1952: 138-141. Original description, ♀ ♂, Madagascar, Mandraka.

*Eupelmus mandrakae* – Hedqvist 1970: 436 (change of combination).

CURRENT TAXONOMIC STATUS. — *Tineobius (Progenitobius) mandrakae* (Risbec, 1952) n. comb.

TYPE MATERIAL. — General collection. Lectotype ♀ (here designated), labeled in Gibson's handwriting: "Elevage du 1.4.1950/ N° 6.18. Eclos 8.5.50/ P. de galle de tige de/ la plante inconnu de la/ Mandraka (A.R.); Inst. Scient./ Madagascar; *Cerambycobius mandrakae* ♀; Lectotype/ (Gibson, 1991) [red label]".

One ♂ paralectotype, labeled in Gibson's handwriting: "*Cerambycobius mandrakae* ♂/ Risbec; Paralectotype".

MNHN.1.75. Original slide of the lectotype and paralectotype, labelled in Risbec's handwriting: "Eupelmidae/ *Cerambycobius mandrakae*/ Risbec/ ♀ et ♂/ T [large red letter]" and "Elevage du 1.4.50/ N° 6.18 Eclos 8.5.50/ P. de galle de tige/ de la plante inconnue/ de la Mandraka/ (A.R.); Inst. Scient./ Madagascar", plus a label in Gibson's handwriting "♀ & ♂ point mounted/ by G. Gibson 1991".

MNHN.1.49. One ♀ paralectotype, dry mounted, with collapsed head but otherwise in good condition, labelled in Risbec's handwriting: "Eupelmidae/ *Cerambycobius mandrakae*/ Risbec" and "Elevage du 11.3.50/ N° 720., Eclos 11.4.50/ P. de. la galle sur/ feuilles d'*Albizia fastigiata* de la/ Mandraka (R. P.); Inst. Scient./ Madagascar".

#### REMARKS

Both specimens from slide MNHN.1.75 were remounted by G. Gibson, labeled accordingly and are in the general collection. The female bears a red label "Lectotype (Gibson, 1991)"; this previously unpublished lectotype designation is here validated. The male from the same slide and the female on slide MNHN.1.49 are paralectotypes. The lectotype and the male paralectotype belong to *Tineobius* Ashmead, 1896, subgenus *Progenitobius* Gibson, 1995. Both specimens have a very long maxillary palpus with elongated last segment (Fig. 3A, C). The female has the hind tibia slightly compressed with a whitish dorsal margin in the basal quarter and structures of the propodeum, Mt7, and syntergum are very similar to that of the type species of the subgenus [*Tineobius (Progenitobius) elongatus* (Risbec, 1952)]. The female on slide MNHN.1.49 belongs to a species of *Eupelmus* (*Episolidelia*) with a foliaceous scape, filamentous dark ovipositor, and fore wing with a median longitudinal infuscation. Although the specimen is mentioned by Risbec (1952), all these characters do not fit the original description.

### *Charitopus bambeyi* Risbec, 1951

*Charitopus bambeyi* Risbec, 1951a: 218-220. Original description, ♀ ♂, Senegal, Bambe. — Hedqvist 1970: 434 (catalogued). — Prinsloo 1979: 22 (possible new combination in *Anastatus*). — Noyes & Prinsloo 1998: 79 (possible new combination in *Heydenia* Förster, 1856).

CURRENT TAXONOMIC STATUS. — *Heydenia bambeyi* (Risbec, 1951) n. comb.





FIG. 3. – **A, C**, *Cerambycobius mandrakae* Risbec, 1952, ♂ paralectotype (**A**) and lectotype ♀ (**C**); **B**, *Fanamokala perineti* Risbec, 1960, lectotype.

TYPE MATERIAL. — MNHN.14.51. Two ♀ and two ♂ syntypes, females dry mounted under one coverslip and entire, males dry mounted and crushed under a second coverslip, labeled in Risbec's handwriting: "*Charitolophus/ Bambeyil* Risbec".

MNHN.14.52. Two ♂ syntypes, mounted in balsam and crushed under the coverslip, labeled in Risbec's handwriting: "*Charitolophus/ Bambeyil* Risbec".

MNHN, ex. coll. ORSTOM.2.27. One ♀ and one ♂ syntypes, dry

mounted under the same slide, the female with the head and prothorax detached, but otherwise both specimens in good condition, labeled in Risbec's handwriting: "*Charitolophus/ Bambeyil* Risbec".

#### REMARKS

The generic name on the slides is *Charitolophus* Förster, 1878 (Eupelmidae, Calosotinae), this being slightly more

realistic, but in the description (Risbec 1951a) the generic placement was changed to *Charitopus* Förster, 1856. Risbec treated it in Eupelmidae but *Charitopus* is a valid generic name in Encyrtidae. The species actually belongs to *Heydenia* Förster, 1856 (Pteromalidae), the same opinion being expressed by Noyes & Prinsloo (1998) and G. Delvare (pers. comm.).

### *Charitopus curvistylus* Risbec, 1951

*Charitopus curvistylus* Risbec, 1951a: 220-222. Original description, ♀, Senegal, Bambey. — Hedqvist 1970: 434 (catalogued).

*Eupelmus curvistylus* – Bouček 1976b: 352 (change of combination). — Prinsloo 1979: 22.

CURRENT TAXONOMIC STATUS. — *Eupelmus* (*Episolindelia*) *curvistylus* (Risbec, 1951) n. stat. [new subgeneric status].

TYPE MATERIAL. — MNHN.14.53. Seven ♀ syntypes, all dry mounted under the same coverslip, in good condition, labeled in Risbec's handwriting: "II.25. Bambey/ *Charitolophus* ?/ *curvistylus* Risbec".

#### REMARKS

On the label the generic name is *Charitolophus* with a question mark, but in the description the generic name is *Charitopus*, a valid generic name in Encyrtidae (see also under *Charitopus bambeyi*). Bouček (1976b) transferred the species to *Eupelmus* and this is accepted here. This is a darkly colored species of the subgenus *Episolindelia* Girault, 1914, with some metallic bluish-green shine, without yellow non-metallic areas and with thick, long, and curved black ovipositor sheaths covered in long dark setae. All specimens in the type series are conspecific so there is no need to select a lectotype.

### *Descampsia dipterae* Risbec, 1955

*Descampsia dipterae* Risbec, 1955: 213-217. Original description, ♀ ♂, Cameroon, Garoua. — Hedqvist 1970: 434 (catalogued). — Non-veiller 1984: 122 (catalogued).

*Anastatus* (*Anastatus*) *diptrae* – Gibson 1995: 104, 318 (lectotype designation, change of combination).

CURRENT TAXONOMIC STATUS. — *Anastatus* (*Anastatus*) *diptrae* (Risbec, 1955).

TYPE MATERIAL. — General collection. Lectotype ♀ plus five ♀ and one ♂ paralectotypes. MNHN, ex. coll. ORSTOM.2.29. Empty slide, labelled in Risbec's handwriting: "45 *Descampsia* *diptrae* R." and in Gibson's handwriting "Syntypes (6 ♀ ♀, 1 ♂) of *Descampsia dipterae* Risbec point-mounted/ by G. Gibson, 1991".

#### REMARKS

Lectotype and five paralectotypes are now point-mounted. Gibson (1995) placed *Descampsia* Risbec, 1955 in synonymy under *A. (Anastatus)*.

### *Eupelmella pedatoria* Ferrière, 1939

*Eupelmella pedatoria* Ferrière, 1939: 166. Original description, ♀, India, Coimbatore. — Risbec 1956a: 128 (misidentification, biology); 1960a: 650 (misidentification, catalogued, biology).

IDENTITY. — A female of *Eupelmus* (*Macroneura*) sp.

SPECIMENS. — MNHN, ex. coll. ORSTOM.2.36. One dry mounted female, in good condition, labeled in Risbec's handwriting "*Eupelmella pedatoria* Ferrière/ ex pupes *Diopsis* *thoracica* Descamps 167".

#### REMARKS

This species cannot be identified without a revision of Afrotropical *Eupelmus* (*Macroneura*), but it is definitely not *E. (Macroneura)* *pedatorius* (type material in BMNH examined by LF).

### *Eupelmella pedatoria* var. *psycephaga* Risbec, 1951

*Eupelmella pedatoria* var. *psycephaga* Risbec, 1951a: 206-208. Original description, ♀, Senegal, Bambey. — Ferrière 1960: 9 (possible synonym of nominal form). — Hedqvist 1970: 435 (catalogued).

*Eupelmus apionidis* – Risbec 1950a: 170, 308; 1951a: 206; 1951b: 1112; 1960a: 628 (*nomen nudum*, discovered by Hedqvist 1970: 436).

*Eupelmus psycephaga* – Risbec 1951a: 207, 251 (*lapsus calami*).

*Eupelmella psycephaga* – Risbec 1951a: 252 (as cited in index).

CURRENT TAXONOMIC STATUS. — *Eupelmus* (*Macroneura*) *psycephagus* (Risbec, 1951) n. comb & n. stat.

TYPE MATERIAL. — General collection. Lectotype ♀ (here designated), labeled: "Fusu L. 17.III. 2011/ Remounted from/ slide 31, box N°14/ Risbec slide collection; Lectotype [red label]; LECTOTYPE/ *Eupelmus psycephagal* Risbec/ Det. Fusu L. 2011" [lectotype labeled in 2011 as *Eupelmus psycephaga* because at that time this name was considered as an alternative original spelling].

MNHN.14.31. Original slide of the lectotype, now contains two ♀ paralectotypes, dry mounted under one coverslip, one with metasoma missing, labeled in Risbec's handwriting: "s- epi mil/ Bambey/ *Eupelmus psycephagal* Risbec" and "Paralectotype 2 ♀; Lectotype [red labels]; Lectotype ♀/ mounted on card/ by L. Fusu 17.III.2011". MNHN.14.29. Two ♀ paralectotypes, mounted in Canada balsam under the same coverslip, labeled in Risbec's handwriting: "*Eupelmus* *psycephagal* Risbec/ ex *Piezotrachelus* *varium*".

MNHN.14.30. One ♀ paralectotype, mounted in Canada balsam, with head detached and squashed laterally, labeled in Risbec's handwriting: "*Eupelmus* sp/ de Psychidae/ du soja/ *Eupelmus* *psycephagal* Risbec/ II 94".

MNHN, ex. coll. ORSTOM.2.38. One ♀ paralectotype, dry mounted, but on the same slide there is another wax enclosure with the coverslip broken and no specimens, labeled in Risbec's handwriting: "*Eupelmus* *psycephagal* Risbec/ Bambey".

NON TYPE MATERIAL. — General collection. One ♀ with mesosoma, two middle legs and one hind leg remaining, labeled: "Madagascar; Behara; Muséum Paris/ IX.40/ A. Seyrig; Type [red label]; *Eupelmus* *psycephagal* Risbec".

#### REMARKS

This species was described from seven females: three collected from the head of millet, one reared from unidentified Psychidae on soya, one without host data and two reared from



*Piezotrachelus varius*. One of the three females from slide MNHN.14.31 was remounted by LF and is here designated as lectotype. There is one female in the general collection mounted on a card point and with a red type label, but it is from Madagascar and cannot be from the type series. The sole existing paralectotype female from slide ORSTOM.2.38 is not conspecific with the lectotype because of the presence of several small black pegs on the basitarsus.

Risbec (1951a) was not consistent in using the name *psychephaga*. *Eupelmella pedatoria* var. *psychephaga* was used in the heading of the original description (p. 206), *Eupelmus psychephaga* on page 207 (for fig. 124) and in the index on page 251, and *Eupelmella psychephaga* in the index on page 252. We do not consider this citation in the index or under a figure as an intended new status. Risbec never listed the full species plus variety name in the index for any variety described in this paper, but simply the variety name under the genus. Similar to *Eupelmus elongatus*, the confusion on the generic placement was most likely generated by the earlier inclusion of this species in *Eupelmus* under the name *Eupelmus apionidis* Risbec (*nomen nudum*) (Risbec 1950a). This name was connected with *E. psychephagus*, although Risbec himself (Risbec 1951a) stated that it was a misidentification of *Eupelmus pedatorius*. Risbec (1951a, b) specified that he had sent out all his specimens of *E. apionidis* for identification. In the BMNH there is a specimen of *Eupelmus psychephagus* with a label in Risbec's handwriting (Fig. 1F) that is part of this material. The specimen label gives the host as *Piezotrachelus illex* Faust, 1899, but according to Risbec (1950a: 165) this was a misidentification of *P. varius*.

### *Eupelminus dagatiguyi* Risbec, 1951

*Eupelminus Dagatiguyi* Risbec, 1951a: 213-214. Original description, ♀, Ivory Coast, Abengourou.

*Eupelmella dagatiguyi* – Hedqvist 1970: 406, 435 (change of combination, keyed). — Bouček 1976b: 353 (erroneous citation of original combination).

*Macroneura dagatiguyi* – Bouček 1976b: 353 (change of combination).

CURRENT TAXONOMIC STATUS. — *Anastatus (Anastatus) dagatiguyi* (Risbec, 1951) n. comb.

TYPE MATERIAL. — MNHN.14.46. Holotype ♀ (by monotypy), dry mounted, entire but the head is detached, labeled in Risbec's handwriting: "*Eupelminus/ Dagatiguyi* Ris/ ex ponte punaise/ cacaoyer/ Abengourou/ F. Dagatiguy/ avec *Anastatus/ XXX*".

#### REMARKS

Risbec (1951a: 214) described the species from a single female that should be regarded as the holotype as already pointed out by Bouček (1976b). Bouček (1976b) transferred the species to *Macroneura* Walker, 1837, as he erroneously considered that Risbec had described the species as *Eupelmella* [sic] *dagatiguyi*, *Eupelmella* Masi, 1919 being a synonym of *Macroneura*. The holotype is clearly a brachypterous *Anastatus* female.

### *Eupelmus elongatus* Risbec, 1951

*Eupelmus elongatus* Risbec, 1951a: 208-211. Original description, ♀ ♂, Senegal, Bambey; 1951b: 1112 (biology); 1960a: 628 (catalogued, biology). — Hedqvist 1970: 436 (catalogued). — Herting 1973: 97 (catalogued). — Agyen-Sampong 1978: 91 (biology). — Nonveiller 1984: 122 (catalogued). — Etienne & Delvare 1987: 197-198, 202 (biology, keyed).

*Eupelmella elongata* – Risbec 1950a: 166, 169-172 (*nomen nudum*); 1951a: 209 (*lapsus calami*); 1960a: 628 (*lapsus calami*).

CURRENT TAXONOMIC STATUS. — *Eupelmus (Eupelmus) elongatus* Risbec, 1951 n. stat. [new subgeneric status].

TYPE MATERIAL. — General collection. Lectotype ♀ (here designated), card mounted, labeled as: "Ex gousse/ niébé; Muséum Paris/ Bambey (Sénégal)/ Risbec 1945; LECTOTYPE [red label]; LECTOTYPE/ *Eupelmus/ elongatus* Risb./ Det. Fusu L. 2011".

Four ♀ paralectotypes: "Ex/ *Piezotra-/ chelus*; Bambey/ Sénégal; J. Risbec/ 28.XII.46; *Eupelmus/ elongatus* Risb. [red label]".

MNHN.14.33. Ten ♀ paralectotypes plus one Pteromalidae female, dry mounted in a wooden slide, with some cotton fibers to prevent them moving around, labeled in Risbec's handwriting: "*P. Piezotrachelus/ varium* Wagn/ N° 367 s- niebel/ Bambey Wa; *Eupelmellal elongata* Risbl + *Bruchobius laticeps* Ashm."

MNHN.14.34. One ♀ and five ♂ paralectotypes, all dry mounted under one round coverslip, labeled in Risbec's handwriting: "ex *Piezotrachelus/ varium/ Eupelmellal elongata* Risbec".

MNHN.14.35. Sixteen ♂ paralectotypes plus three Eulophidae males, all dry mounted under one coverslip, labeled in Risbec's handwriting: "*P. Piezotrachelus/ varium* Wagn/ N° 367 s- niebel/ Bambey Wa/ *Eupelmella elongata* ♂".

MNHN.14.36. One ♀ and about 10 ♂ paralectotypes, plus Pteromalidae and Eulophidae to a total of 17 specimens, dry mounted under one coverslip and partly fragmented, labeled in Risbec's handwriting: "*Eupelmellal elongata* Risbec/ ex. *Piezotrachelus/ varium* Wagn./ N° 367 s- niebel/ Bambey Wane".

MNHN.14.37. Two ♀ paralectotypes plus one *E. (Macroneura)* female, dry mounted under one coverslip, labeled in Risbec's handwriting: "*Eupelmellal elongata* Risbec/ ex. *Piezotrachelus/ varium* Wgn./ 392. Wane/ Bambey".

MNHN.14.38. Two ♀ and two ♂ paralectotypes, balsam mounted in pairs under two different coverslips, labeled in Risbec's handwriting: "*Eupelmellal elongata* Risbec/ ex *Piezotrachelus/ varium* Wagn/ Bambey".

MNHN.14.39. At least 12 ♀ and four ♂ paralectotypes, plus one *Eupelmus orientalis* female and specimens of Eurytomidae, Pteromalidae, Eulophidae and Pteromalidae, all dry mounted under one coverslip, labeled in Risbec's handwriting: "ex *Piezotrache[us]/ varium/ Eupelmellal elongata* Risbec/ Bambey".

MNHN.14.40. Three ♀ paralectotypes plus two females of *Eupelmus (Macroneura) psychephagus* Risbec, dry mounted under one coverslip, labeled in Risbec's handwriting: "*Eupelmellal elongata* Risbec/ ex. *Piezotrachelus/ varium* Wgn./ 363./ Bambey Wane".

MNHN.14.41. Two ♀ paralectotypes, dry mounted under one coverslip, labeled in Risbec's handwriting: "ex gosses niébé/ Bambey. 9.1.47/ *Eupelmellal elongata* Risbec".

MNHN.14.42. One ♀ paralectotype plus one true bug, dry mounted under one coverslip, labeled in Risbec's handwriting: "s- épi mil/ Wane. Bambey/ 1947/ *Eupelmellal elongata* Risbec".

MNHN.14.43 and 14.44 listed in box 14 under *E. elongatus* are missing. MNHN, ex. coll. ORSTOM.2.31. Ten ♀ paralectotypes, dry mounted in a wooden slide, with some cotton fibers to prevent damage, labeled in Risbec's handwriting: "*P. Piezotrachelus/ varium* Wgn/ N° 367 s- niebel/ Bambey Wa; *Eupelmellal elongata* Risb."

MNHN, ex. coll. ORSTOM.2.33. Fourteen ♀ and three ♂ paralectotypes, dry mounted under one coverslip, labeled in Risbec's handwriting: "Ex gousses/ niébé/ *Eupelmella elongata* Risbec".

MNHN, ex. coll. ORSTOM.2.35. Numerous paralectotypes of both sexes, plus many other chalcid wasps, mostly Pteromalidae, all dry mounted under two coverslips, labeled in Risbec's handwriting: "Ex *Piezotra-chelus varium*/ *Eupelmus* [overwritten to:] *Eupelmella psychephaga* [crossed off]/ *elongata* Risbec".

NON TYPE MATERIAL. — MNHN, ex. coll. ORSTOM.2.32. One ♀ and one ♂, dry mounted and crushed under one coverslip, labeled with ink directly on glass: "♀ ♂/ *Eupelmella elongata* Risbec".

MNHN, ex. coll. ORSTOM.2.34: one ♂ dry mounted and crushed under a coverslip, labeled with ink directly on glass: "*Eupelmella elongata* Risbec/ ♂".

#### REMARKS

This species was described from an unstated number of females and males reared from larvae of *Piezotrachelus varius* in pods of black-eyed pea (niébé) and one female collected from the head of millet. Specimens on slides ORSTOM.2.32 and ORSTOM.2.34 are not from the type series as there is no host data on the labels and the slides are labeled distinctly from the others, in black ink directly on glass. The general collection contains five card mounted specimens that must have originated from slides MNHN.14.43 and MNHN.14.44 that are currently missing. Although the remounting is not mentioned on the labels, they are similar in content to the labels on the remaining slides. The type material is extremely heterogeneous, containing at least two species of *Eupelmus* from the *urozonus* species-group, one with the ovipositor shorter than the metatibia and another with the ovipositor longer than the metatibia. The lectotype here selected belongs to the species with the longer ovipositor, as mentioned in the original description: "Tibias, 0,76 mm [...] tarière, 0,95 mm.". Etienne & Delvare (1987) give a short description of this species in a key for the parasitoid species associated with *Solanum aethiopicum* L. (Solanaceae). They mention the visible part of the ovipositor being as long as hind tibia, but this is probably due to different preservation techniques. Many specimens in the type series of *E. elongatus* have the second valvifer quite obviously exposed as a result of drying and hence apparent ovipositor sheath length is greater than hind tibia (but length of third valvulae about as long as hind tibia, measured according to Al khatib *et al.* [2014]). In critical point dried specimens of the same species gaster frequently nearly extends to apex of second valvifer and hence apparent ovipositor sheath length is sometimes about as long as hind tibia (usually at least slightly longer).

Risbec (1951a) was not consistent in using the name *elongatus*. *Eupelmus elongatus* was used in the heading of the original description (p. 208), but *Eupelmella elongata* on page 209 (for fig. 125). Similar to *Eupelmus psychephagus*, the confusion was most likely generated by the earlier inclusion of this species in the genus *Eupelmella* under the name *Eupelmella elongata* (*nomen nudum*) (Risbec 1950a).

### *Eupelmus fissicollis* Risbec, 1952

*Eupelmus fissicollis* Risbec, 1952: 109-112. Original description, ♀ ♂, Madagascar, Behara; 1958: 106 (biology). — Hedqvist 1970: 436 (catalogued).

CURRENT TAXONOMIC STATUS. — *Eupelmus* (*Eupelmus*) *fissicollis* Risbec, 1952 n. stat. [new subgeneric status].

TYPE MATERIAL. — General collection. Lectotype ♀ (here designated), card mounted: "Madagascar; Behara; Muséum Paris/ XI.40/ A. Seyrig; J; Type [red label]; *Eupelmus fissicollis* Risbec [in Risbec's handwriting]; Lectotype [red label]; LECTOTYPE/ *Eupelmus fissicollis* Risbec remounted from/ minuten/ Leg. Fusu L. 24. III. 2011". Three ♀ paralectotypes, minuten-pin mounted, labeled similar to the lectotype but only with the first four labels.

MNHN.1.4. One ♂ paralectotype, dry mounted, with parts missing and head and metasoma detached, labeled in Risbec's handwriting: "*Eupelmus fissicollis* Risbec/ T [large red letter]" and "MADAGASCAR; MUSÉUM PARIS/ XI.40/ A. Seyrig; J; Behara; Madagascar/ Museum Paris/ XI.40/ A. Seyrig/ *Eupelmus* w. Behara".

MNHN.1.73. One ♀ paralectotype, dry mounted, in good condition, labeled in Risbec's handwriting: *Eupelmus elongatus*. Risbec/ var./ T [large red letter]" and "Elevage du 25.9.50/ Eclos. le 14.10.50/ N° G122/ P. galle de tige des/ *Helichrysum Beze-l rianum* d'Alasora (A.R.)".

NON TYPE MATERIAL. — MNHN.4.52. An *Eupelmus* female, labeled in Risbec's handwriting: "*Eupelmus fissicollis* Risbec var." and "Elev. du 10.3.51. N° G.206. Eclos le 27.3.51/ Inst. Scient. Madagascar/ Parasite de galle de chenille par renflement/ de tige de *Psiadia altissima*./ Ambohidrapeto. (A. R.)".

#### REMARKS

A female in the general collection labeled as type was selected as lectotype. It was card mounted by LF from the original minuten-pin and is entire. The data on slide MNHN.1.73 mentioned above are exactly those given by Risbec (1952) for "*Eupelmus fissicollis*, n. sp., variété" (only N°122 on slide is N°112 in the publication). The specimen is identified as "*Eupelmus elongatus* Risbec var." Data on slide MNHN.4.52 refers to the specimen mentioned by Risbec in 1958.

### *Eupelmus sirphidi* Risbec, 1951

*Eupelmus sirphidi* Risbec, 1951: 211-212. Original description, ♀, Senegal, Bambey; 1950a: 437 (*nomen nudum*). — Hedqvist 1970: 436 (catalogued).

*Anastatus sirphidi* – Bouček 1976b: 350 (lectotype designation, change of combination).

CURRENT TAXONOMIC STATUS. — *Anastatus* (*Anastatus*) *sirphidi* (Risbec, 1951) n. stat. [new subgeneric status].

TYPE MATERIAL. — MNHN.14.45. Lectotype ♀ (entire) and one ♀ paralectotype dissected by Risbec before the description (see Risbec, 1951a), both dry mounted under the same coverslip, labeled in Risbec's handwriting: "ex pupes sirphides [sic]/ *Eupelmella sirphidi* Risbec/ 25-10-46" and in Gibson's handwriting "Complete/ female/ LECTOTYPE/ *Eupelmus sirphidi* Risb/ (Boucek, 1976)".

#### REMARKS

The lectotype was designated by Bouček (1976b). He also transferred the species to *Anastatus* and this is confirmed here.

*Eupelmus* sp. (Risbec 1958: 107).

IDENTITY. — An *Eupelmus* male.

SPECIMENS. — MNHN.4.23. A dry mounted *E. (Eupelmus)* male with the head detached, labelled in Risbec's handwriting: "*Eupelmus*/ sp." and "Elev. du 10.3.51. N° G.206. Eclos le 9.4.51/ Inst. Scient. Madagascar/ Parasite de galle de chenille par renfle- ment de tige de *Psiadia. altissima*./ Ambohidrapeto. (A.)."

*Eusandalum bambeyi* Risbec, 1951

*Eusandalum bambeyi* Risbec, 1951a: 232-234. Original description, ♀ ♂, Senegal, Bambey. — Bouček 1967: 265 (catalogued); 1976b: 351 (revived combination). — Gibson 1989: 56 (catalogued).

*Polymoria bambeyi* – Hedqvist 1970: 428-429, 441 (lectotype designation, change of combination, illustrated, keyed, catalogued).

CURRENT TAXONOMIC STATUS. — *Eusandalum bambeyi* Risbec, 1951.

TYPE MATERIAL. — General collection. Lectotype ♀, specimen glued laterally to a rectangular card, mesosoma crushed, gaster collapsed, half of left antenna missing: "*Eusandalum/ bambeyi* Risbec/ Bambey [label detached from slide MNHN.14.65 that is missing, in Risbec's handwriting]; Lectotypus ♀/ *Eusandalum/ bambeyi* Risb./ K.-J. Hedqvist det. 1965; *Eusandalum/ bambeyi*".

One ♂ paralectotype, glued laterally to a rectangular card, both antennae broken beyond fl1, but glued next to the specimen, mesosoma crushed and only basal part of right wing present: "*Polymoria/ bambeyi* (Risb.)/ ♂/ K.-J. Hedqvist det. 69; Paralectotype; *Eusandalum/ bambeyi* (R.)."

MNHN, ex. coll. ORSTOM.2.40. Paralectotype ♀, dry mounted, crushed under the coverslip, labeled in Risbec's handwriting: "Bambey/ Wane. 1947./ *Eusandalum/ bambeyi* Risbec", in Gibson's handwriting "PARALECTOTYPE/ *Eusandalum/ bambeyi* Risbec/ (Hedqvist, 1970)", and "TYPE [red label]; BONDY SEINE/ Coll. RISBEC/ C.S.T ORSTOM".

## REMARKS

This species was described from two females and one male. Hedqvist (1970) redescribed the species and designated a lectotype. He classified it in the genus *Polymoria* Förster, 1856 whereas Bouček (1976b) retained the original combination. Contrary to Hedqvist (1970), our opinion is that the male paralectotype is not conspecific with the female lectotype. The slide MNHN.14.65 is missing, the specimens were remounted by Hedqvist and are presently housed in the general collection of the MNHN.

*Eusandalum bicristatum* Risbec, 1951

(Fig. 2A, E)

*Eusandalum bicristatum* Risbec, 1951a: 235-236. Original description, ♀, Senegal, Bambey; 1954b: 123-125 (male described, illustrated, biology). — Hedqvist 1970: 440 (catalogued). — Bouček 1967: 265 (catalogued). — Gibson 1989: 56 (catalogued).

CURRENT TAXONOMIC STATUS. — *Eusandalum bicristatum* Risbec, 1951.

TYPE MATERIAL. — MNHN, ex. coll. ORSTOM.2.41. Holotype ♀ (by monotypy), about 3.5 mm in length, balsam-mounted laterally, badly squashed, the slide broken in two parts approximately

at the level of the syntergum and fixed with adhesive tape, labeled in Risbec's handwriting: "*Eusandalum/ bicristatum/* Risbec/ 1944 Bambey" and "TYPE [red label]; BONDY SEINE/ Coll. RISBEC/ C.S.T. ORSTOM".

NON TYPE MATERIAL. — General collection. A non type card mounted female: "*Eusandalum/ (Eupelmidae)/ E. bicristatum/* IX-48 Risbec [label detached from slide MNHN.14.66, in Risbec's handwriting; *E. bicristatum* and Risbec in a different ink]; Holotype/ Bouček/ 1975; *Calosotal aristidae/* Risb./ ♀/ K.-J. Hedqvist det. 69 [obviously a mislabeling]; Holotype/ ♀ *Eusandalum/ bicristatum* Risb./ det. Z. Bouček, 1975/ not *Calosotal aristidae*".

MNHN, ex. coll. ORSTOM.2.42. Male genitalia and mandible, which are parts of the second male mentioned by Risbec (1954b), labeled in Risbec's handwriting: "*Eusandalum/ bicristatum* Risbec/ Penis Md. ♂".

MNHN, ex. coll. ORSTOM.2.43. A dry mounted male mentioned later by Risbec (1954b), labeled in Risbec's handwriting: "*Eusandalum ♂/ bicristatum* Risbec/ ex *Acacia tortilis*./ 40 km de Bechar/ Descarpentries".

## REMARKS

This species was described from a single female (Risbec 1951a, 1954b). The female on a rectangular card (see above) with a holotype label, a label by Hedqvist as "*Calosota aristidae* Risbec" and another by Bouček as "Holotype ♀ *Eusandalum bicristatum* Risb. not *Calosota aristidae*" is not the holotype, but probably the specimen from slide MNHN.14.66 that is missing. The holotype is the specimen on slide ORSTOM.2.41 because it is the correct size and has the correct locality data, and it has been labeled accordingly.

*Eusandalum striatum* Risbec, 1952

*Eusandalum striatum* Risbec, 1952: 100-102. Original description, ♀, Madagascar, Antanimora. — Hedqvist 1970: 440 (catalogued). — Bouček 1967: 265 (catalogued). — Gibson 1989: 57 (catalogued).

CURRENT TAXONOMIC STATUS. — *Eusandalum striatum* Risbec, 1952.

TYPE MATERIAL. — General collection. Holotype ♀ (by monotypy): "Madagascar/ Antanimora; Museum Paris/ II.37/ A. Seyrig; Type [red label]; *Eusandalum/ striatus* Risbec; Museum Paris/ Coll. Risbec". MNHN.1.74. Part of the right antenna of the holotype including fl1 to clava, dry mounted, labeled in Risbec's handwriting: "Eupelmidae/ *Eusandalum/ striatum* [last s corrected to m]/ Risbec/ T [large red letter]" and "part of antenna/ of Holotype [red label]/ Fusu L./ 2011".

## REMARKS

This species was described from a single specimen. Both antennae of the holotype are broken off, the left beyond fl1, the right beyond the pedicel. The antenna on slide MNHN.1.74 listed above belongs with high probability to the holotype.

*Fanamokala perineti* Risbec, 1960

(Fig. 3B)

*Fanamokala perineti* Risbec, 1960b: 130-133. Original description, ♂, Madagascar, Perinet.



CURRENT TAXONOMIC STATUS. — *Eupelmus* (*Episolindelia*) *perineti* (Risbec, 1960) n. comb.

TYPE MATERIAL. — MNHN.5.14. Lectotype ♂ (here designated), encircled with black ink, and one ♂ paralectotype, both dry mounted under one coverslip; fragments of gastral segments dry mounted under the second one, labeled in Risbec's handwriting: "*Fanamokala perineti*/ Risbec/ T [large red letter]" and "Elev. Du 7.4.51. N° G.230. Eclos le 17.4.51/ Inst. Scient. Madagascar/ Parasite de galle de tige de Fanamoka/ Perinet (A. R.)".

#### REMARKS

*Fanamokala* was described in Pteromalidae (Risbec, 1960b) but both syntypes are *Eupelmus* (*Episolindelia*) males. Consequently, *Fanamokala* is a junior synonym of *Eupelmus*, subgenus *Episolindelia* (n. syn.). The designated lectotype is the specimen with the head compressed and detached, but present, and with its body laterally compressed under the coverslip (Fig. 3B). The other male (paralectotype) is also compressed and has half of the gaster detached and mounted under the second coverslip.

### *Macreupeumus aliberti* Risbec, 1951

*Macreupeumus Aliberti* Risbec, 1951a: 230-231. Original description, ♀, Ivory Coast, Abengourou.

*Macreupeumus aliberti* – Hedqvist 1970: 437 (catalogued).

*Anastatus ali* Bouček, 1976b: 349 (change of combination and replacement name).

CURRENT TAXONOMIC STATUS. — *Anastatus* (*Anastatus*) *ali* Bouček, 1976 n. stat. [new subgeneric status].

TYPE MATERIAL. — General collection. Lectotype ♀ (here designated), point mounted, labeled in Gibson's handwriting: "*Macreupeumus/ Aliberti* Risbec/ H. Alibert/ n° 329; Lectotype/ (Gibson, 1991). Five ♀ paralectotypes, point mounted, labeled in Gibson's handwriting: "*Macreupeumus/ Aliberti* Risbec". MNHN.14.64. Empty wooden slide, labeled in Risbec's handwriting: "aff *Brasema*/ Eupelmidae/ Alibert/ 329./ VI.86; *Macreupeumus/ ovicida* [crossed off] Risbec/ *Aliberti*" and in Gibson's handwriting "Syntypic series/ 6 ♀ ♀ point mounted/ by G. Gibson 1991".

#### REMARKS

The lectotype selected by Gibson and the five paralectotypes are point-mounted and this lectotype designation is validated here. Bouček (1976b) transferred the species to *Anastatus* and proposed the replacement name *Anastatus ali* Bouček, 1976 (*nec Anastatus aliberti* Risbec, 1951).

### *Macreupeumus australis* Risbec, 1952

*Macreupeumus australis* Risbec, 1952: 122-124. Original description, ♀, Madagascar, Bekily. — Hedqvist 1970: 437 (catalogued).

*Eupelmus austron* Bouček, 1976b: 352 (change of combination and replacement name).

CURRENT TAXONOMIC STATUS. — Synonym of *Eupelmus* (*Eupelmus*) *fissicollis* Risbec, 1952 n. syn.

TYPE MATERIAL. — General collection. Lectotype ♀ (here designated), tip of the right antenna and the right hind wing broken, labeled in Risbec's handwriting: "*Macreupeumus/ australis* Risbec" and "Madagascar/ Bekily/ reg. sud de l'île; Muséum Paris/ XII.36/ A. Seyrig; Type [red label]; Lectotype [red label]; Designated/ by Ebrahimi/ June 2006 [red label]".

One ♀ paralectotype, minuten-pin mounted, head, third valvulae, hind legs and one middle leg missing: "Madagascar/ Bekily/ reg. sud de l'île; Muséum Paris/ IX.36/ A. Seyrig; Museum Paris/ Coll. Risbec; Paralectotype [red label]; PARALECTOTYPE/ *Macreupeumus/ australis* Risbec/ Det. Fusu 2011".

One ♀ paralectotype, minuten-pin mounted, head, gaster, and one fore leg missing: "Madagascar/ Bekily/ reg. sud de l'île; Muséum Paris/ XI.38/ A. Seyrig; Museum Paris/ Coll. Risbec; Paralectotype [red label]; PARALECTOTYPE/ *Macreupeumus/ australis* Risbec/ Det. Fusu 2011".

MNHN.1.76. One ♀ paralectotype, dry mounted, dissected and crushed, labeled in Risbec's handwriting: "Bekily/ *Macreupeumus/ sp.*/ N°2/ A. Seyrig; Eupelmidae/ *Macreupeumus/ australis* Risbec/ T [large red letter]".

#### REMARKS

A minuten-pin mounted female on a pin that bears an identification label in Risbec's handwriting was selected as lectotype. Bouček (1976b) wrongly considered this specimen as the holotype, but this cannot be regarded as a lectotype designation (ICZN Art. 74.6) because Risbec (1952) explicitly mentions four female syntypes from Bekily collected by A. Seyrig. We located two of the paralectotypes under *Calosoter melanoptera* Risbec, 1952 and the third in the slide collection. According to Bouček the species belongs to *Eupelmus*; he established the replacement name *Eupelmus austron* Bouček, 1976 for *Macreupeumus australis* Risbec, 1952 *nec Idoleupeumus* (= *Eupelmus*) *australis* Girault, 1915. The species is a synonym of *Eupelmus fissicollis* Risbec, 1952, described on page 109 in the same paper as *Macreupeumus australis*.

### *Macreupeumus ovicida* Risbec, 1951

*Macreupeumus ovicida* Risbec, 1951a: 227-229. Original description, ♀ ♂, Ivory Coast, Abengourou; 1951b: 1111-1112 (variability). — Hedqvist 1970: 437 (catalogued).

*Anastatus ovicida* – Bouček 1976b: 350 (change of combination).

CURRENT TAXONOMIC STATUS. — *Anastatus* (*Anastatus*) *ovicida* (Risbec, 1951) n. stat. [new subgeneric status].

TYPE MATERIAL. — General collection. Lectotype ♀ (here designated), point mounted, labeled in Gibson's handwriting: "*Anastatus/ Macreupeumus/ ovicida* Risbec; ex w orthoptères/ sur cacaoyer/ Abengourou/ F. Dagatiguy; Lectotype/ (Gibson, 1991)".

Two ♀ and one ♂ paralectotypes, point mounted, labeled in Gibson's handwriting: "*Macreupeumus/ ovicida*".

MNHN.14.62. Empty slide labeled in Risbec's handwriting: "*Anastatus/ Macreupeumus/ ovicida* Risbec/ ex w orthoptères/ s- cacaoyer/ Abengourou/ F. Dagatiguy" and in Gibson's handwriting: "3 ♀ 1 ♂ point-mounted/ by G. Gibson/ 1991".

MNHN, ex. coll. ORSTOM.2.45. Fifteen ♀ and two ♂ paralectotypes, dry mounted in a wooden slide (two of the females mentioned in the original description are missing), slide labeled in Risbec's handwriting: "N° 635/ Alibert/ ex w orthoptères/ Abengourou; *Macreupeumus/ ovicidal* Risbec".



OTHER MATERIAL. — MNHN.14.63. Wooden slide with host's eggs, labeled in Risbec's handwriting: "ω. orthoptères/ parasitées/ Alibert/ 635/ Abengourou/ mis[?] par".

#### REMARKS

The lectotype selected by G. Gibson and four syntypes are point-mounted. This lectotype designation is validated here. According to Bouček (1976b), the species clearly belongs to *Anastatus* and this is confirmed here.

### *Mesocomys vuilleti* (Crawford, 1912) (Figs 1E, 2D)

*Anastatus vuilleti* Crawford, 1912: 5. Original description, ♀ ♂, French Senegal (now Mali), Koulikoro.

*Mesocomys Vuilleti* – Risbec 1950a: 54, 57, 59, 63, 457; 1951a: 191; 1960a: 638, 646–648.

IDENTITY. — Males and females of *Mesocomys* Cameron, 1905 plus several *Anastatus* females, but the species cannot be identified with confidence without remounting the specimens.

SPECIMENS. — MNHN.14.1 and 14.2. Both slides contain numerous *Mesocomys* females dry mounted under one large coverslip, labeled in Risbec's handwriting: "Eupelminae/ ex *Cirina* ω/ *butyrospermil Mesocomys/ vuilleti* Crwf ♀".

MNHN.14.3. A *Mesocomys* female, dry mounted, labeled in Risbec's handwriting: "Bambey/ 1945/ *Mesocomys/ vuilleti* Crwf".

MNHN.14.4. One *Mesocomys* and one *Eupelmus* female, dry mounted under two coverslips, labeled in Risbec's handwriting: "Bambey/ *Mesocomys/ vuilleti*. Crwf./ (pres etiquette)".

MNHN.14.5. One dry mounted *Anastatus* female, labeled in Risbec's handwriting: "*Mesocomys/ vuilleti* Crwf ♀/ ex ω. del *Charaxes epijasius/ Bambey*".

MNHN.14.6. Numerous *Mesocomys* females, dry mounted under one coverslip and host's eggs glued with Canada balsam next to it, labeled in Risbec's handwriting: "Eupelmidae/ ex ponte./ Abengourou/ Alibert. 760./ avec Eulophidae/ *Mesocomys vuilleti* Crwf./ 16".

MNHN.14.7. One *Anastatus* female, labeled in Risbec's handwriting: "*Solindenia*. [crossed off]/ Eupelminae./ 13.VIII.23/ *Mesocomys/ vuilleti* Crwf/ 17".

MNHN.14.8. One *Anastatus* female, labeled in Risbec's handwriting: "*Solindenia* [crossed off]/ *Mesocomys vuilleti* Crwf/ ♀/ ex ω./ *Chrysopsychel ladburyi* ?/ VII.60".

MNHN.14.9. About 16 *Mesocomys* females, dry mounted under one coverslip, labeled in Risbec's handwriting: "ex ω/ *Chrysopsychel ladburyi* Bambey/ *Mesocomys* ♀/ *vuilleti* Crwf".

MNHN.14.10. Two *Mesocomys* females, dry mounted under one coverslip, labeled in Risbec's handwriting: "s- kissi 9.I.47/ Bambey/ *Mesocomys/ vuilleti* Crwf./ ♀".

MNHN.14.11. Nine *Mesocomys* females, dry mounted under one coverslip, labeled in Risbec's handwriting: "ex gousses *Prosopis* 23.I.47. Bambey./ Baye./ *Mesocomys/ vuilleti* Crwf/ ♀".

MNHN.14.12. Two *Mesocomys* females, dry mounted under one coverslip, labeled in Risbec's handwriting: "M. Bambey/ *Mesocomys/ vuilleti* Crwf./ ex gousses *Prosopis*".

MNHN.14.13. Five *Mesocomys* females, dry mounted under one coverslip, labeled in Risbec's handwriting: "*Mesocomys/ vuilleti* Crwf/ ♀/ ex ω. *Cirinal butyrospermil* Vuillet".

MNHN.14.15. Numerous *Mesocomys* females and males, dry mounted under one coverslip in a wooden slide, labeled in Risbec's handwriting: "*Mesocomys/ vuilleti* Crwf/ ♀; ex ω/ *Cirinal butyrospermil* 5.12.46/ Bambey".

MNHN.14.16. Numerous *Mesocomys* females and males in a wooden slide, dry mounted under one coverslip, labeled in Risbec's handwriting: "epip. [illegible text]/ *Epiphora baubini*./ Eupelmidae/ *Mesocomys/ vuilleti* Crwf".

MNHN.14.17. Several broken *Mesocomys* females in a cardboard slide, labeled in Risbec's handwriting: "*Mesocomys/ vuilleti* Crwf/ *Solindenia* [crossed off]/ (Eupelmidae)/ ex ω. *Cirina butyrospermil* II.85".

MNHN.14.18. A few *Mesocomys* females in a cardboard slide, labeled in Risbec's handwriting: "II.87/ Eupelmidae/ *Mesocomys. vuilleti* *Solindenia* of [crossed off] Crwf ♀/ ex *Bunaea* ω./ Alibert N° 17".

MNHN, ex. coll. ORSTOM.2.47. Two *Mesocomys* males and two *Anastatus* females, dry mounted under one coverslip, labeled in Risbec's handwriting: "ex chenille/ *Parnara mathias*/ 13.8.46/ Bambey./ *Mesocomys/ vuilleti* Crwf/ 20".

MNHN, ex. coll. ORSTOM.2.48. Numerous *Mesocomys* male specimens and one female, dry mounted under one long coverslip, labeled in Risbec's handwriting: "Eupelminae ex/ ω *Cirinal butyrospermil Mesocomys/ vuilleti* Crwf ♂".

MNHN, ex. coll. ORSTOM.2.49. Three *Mesocomys* males dry mounted in a cardboard slide, labeled in Risbec's handwriting: "*Mesocomys/ vuilleti* Crwf ♂/ ex ω. *Cirinal butyrospermil* Vuill./ Bambey".

### *Metapelma obscuratum* Westwood, 1874

*Metapelma obscurata* Westwood, 1874: 150. Original description, ♀, India Orientalis.

*Metapelma obscuratum* – Risbec 1951a: 191 (misidentification).

IDENTITY. — An undescribed species near *Metapelma mirabile* Brues, 1906 described from South Africa.

SPECIMENS. — MNHN.14.77. One dry mounted female in a wooden slide, labeled in Risbec's handwriting: "N°39 Eupelminae/ s- tronç/ mandarinier/ Bambey/ 4-5-47; *Metapelma obscurata* Westw".

### *Neanastatus tenuis* var. *bicolor* Risbec, 1951

*Neanastatus tenuis* var. *bicolor* Risbec, 1951a: 236–239. Original description, ♀, Senegal, Bambey. — Hedqvist 1970: 438 (catalogued).

*Neanastatus bicolor* – Risbec 1951a: 237, 252 (*lapsus calami*).

CURRENT TAXONOMIC STATUS. — *Neanastatus bicolor* Risbec, 1951 n. stat.

TYPE MATERIAL. — MNHN.14.67. Holotype ♀ (by monotypy), dry mounted laterally, in good condition, labeled in Risbec's handwriting: "*Baolia bicolor* Risbec/ Bambey" and "Holotype [red label]; HOLOTYPE ♀/ *Neanastatus/ tenuis bicolor* Ris./ Det. Fusu L. 2011".

#### REMARKS

The name *Baolia bicolor* is undoubtedly a manuscript name by Risbec. It is most probably derived from the ancient Kingdom of Baol, where nowadays Bambey (the type locality) is situated. The comparison of the specimen on slide MNHN.14.67 with the original description of *Neanastatus tenuis* var. *bicolor* shows without doubt that this is the holotype. The taxon was introduced as "*Neanastatus tenuis* Ferrière, var. *bicolor*, n. var.", but as "*Neanastatus bicolor* n. g., n. sp." under fig. 132, where "n. g." probably refers to the intended new generic name *Baolia*. It was listed as a species again in the index on page 252 (Risbec 1951a). We do not consider this citation in the index

as an intended new status. Risbec never listed the full species plus variety name in the index for any variety described in this paper, but simply the variety name under the genus.

The holotype is clearly conspecific with the specimen described by Ferrière (1938) as a morphotype of *Neanastatus africanus* Ferrière, 1938 with a yellow band on the mesoscutum. *Neanastatus* Girault, 1913 is a genus with a very uniform morphology, many species differing mostly in color pattern. It is not clear if in this case the color difference is of specific value or just intraspecific variability, as one of us (LF) could not find any other difference except color between the holotype of *Neanastatus tenuis* var. *bicolor* and the type material of *Neanastatus africanus* Ferrière (BMNH). However we take a conservative approach and treat *N. bicolor* as a distinct species. The examination of numerous specimens of *N. africanus*, including comparatively large series, shows that the mesoscutal color is a stable character.

#### DISTRIBUTION

We have seen specimens of *N. africanus* from Botswana (13 ♀, one ♂, Serowe), Jordan (four ♀, four ♂, Dead Sea), Mozambique (one ♀, Niassa) (CNC), Namibia (one ♀, Keetmanshoop; one ♀, Gross Otavi), Nigeria (one ♀, Ibadan) (BMNH), Somalia (two ♀, one ♂, Mogadishu), South Africa (one ♀, Bloemfontain farm; 11 ♀, 17 ♂, Farm Bitline; three ♀, two ♂, Transvaal; one ♀, 43 km NE Willowmore, all in CNC; one ♀, one ♂, Grahamstown in BMNH), Togo (two ♀, Kpélé Bémé SW of Adagali and Retenue de Nangbéto) (coll. AICF), Uganda (one ♀, Kawanda in BMNH; one ♀, Kibale Forest in CNC), Yemen (one ♀, 12 km NW Manakhah) (CNC), and Zimbabwe (three ♀, two ♂, Harare) (BMNH).

*Neanastatus bicolor* is more rarely collected. Except the specimen mentioned by Ferrière (1938) from Namibia and Risbec's type from Senegal, we have seen specimens from Gambia (four ♀, Bakan) (BMNH), Ivory Coast (one ♀, Bouaké), South Africa (one ♀, one ♂, Aberdeen in BMNH; one ♀, Natal in CNC), Togo (one ♀, Fatchiahoe, 20 km NNW' Tahou) (coll. AICF), and Uganda (one ♀, one ♂, Lira) (BMNH).

#### *Neanastatus tenuis* var. *platygasteri* Risbec, 1956

*Neanastatus tenuis* var. *platygasteri* Risbec, 1956b: 245. Original description, ♀, Cameroon. — Hedqvist 1970: 438 (catalogued). — Nonveiller 1984: 122 (catalogued).

*Neanastatus tenuis* – Herting 1977: 118 (catalogued); 1978: 26 (catalogued).

CURRENT TAXONOMIC STATUS. — *Neanastatus platygasteri* Risbec, 1956 n. stat.

TYPE MATERIAL. — MNHN, ex. coll. ORSTOM.2.52. Holotype ♀ (by monotypy), dry mounted, in good condition except the wings, labeled in Risbec's handwriting: "*Neanastatus tenuis* Ferrière/ var./ par de *Platygasteri*/ *pachydisiplosis* Pouss. I.55. Descamps/ 222" and "Holotype [red label]; HOLOTYPE ♀/ *Neanastatus tenuis platygasteri*/ Risb./ Det. Fusu L. 2011".

#### REMARKS

The specimen used for the description of *N. platygasteri* is immature, with deformed wings and the antennae still encased in the pupal exuvia. The areas that are dark brown in fully matured *Neanastatus* specimens are of a pale brownish color and the yellow areas are dirty-yellow. Nevertheless, the specimen clearly belongs to a different species than *N. tenuis* Ferrière, 1938 (holotype in BMNH examined by LF).

#### *Oodera dakarensis* Risbec, 1957

*Oodera dakarensis* Risbec, 1957a: 256-260. Original description, ♀ ♂, Senegal, Dakar.

CURRENT TAXONOMIC STATUS. — *Eupelmus* (*Eupelmus*) *dakarensis* (Risbec, 1957) n. comb.

TYPE MATERIAL. — MNHN, ex. coll. ORSTOM.2.54. Lectotype ♀ (here designated) and one ♂ paralectotype, dry mounted under the same coverslip, both in very good condition, but with antennae encased in pupal exuvia, labeled in Risbec's handwriting: "*Oodera dakarensis* Risbec/ Senegal./ Dakar. types." and "Lectotype [red label]".

#### REMARKS

This species was described from three females and one male. Only the above two specimens were located in MNHN. The female is here designated as lectotype.

#### *Paravignalia hemipterae* Risbec, 1951 (Fig. 1B)

*Paravignalia hemipterae* Risbec, 1951a: 274-275. Original description, ♂, Abengourou; 1950a: 401, 410, 447 (*nomen nudum*); 1955: 218-219 (junior synonym of *Anastatus aliberti* Risbec). — Hedqvist 1970: 430-431 (synonym of *Anastatus aliberti*, catalogued). — Bouček 1976b: 349 (synonymy with *Anastatus aliberti* incorrect).

*Anastatus ?hemipterae* – Matteson 1981: 549-550 (change of combination, biology).

*Anastatus aliberti* – Herting 1971: 90 (catalogued).

CURRENT TAXONOMIC STATUS. — Synonym of *Anastatus* (*Anastatus*) *aliberti* Risbec, 1951.

TYPE MATERIAL. — MNHN, ex. coll. ORSTOM.2.2. Lectotype ♂ (here designated), dry mounted, in good condition, labeled in Risbec's handwriting: "*Anastatus/ Aliberti*. Risbec/ ex ω *Homoeocerus/ s- cacaoyer./ Abengourou/ H. Alibert*" and "Lectotype [red label]; [a blue round label]; LECTOTYPE ♂/ *Paravignalia hemipterae* Risbec/ Det. Fusu L. 2011" [see also under *Anastatus aliberti*].

MNHN.14.80. Five ♂ paralectotypes, dry mounted under one coverslip, three of them with heads missing, labeled in Risbec's handwriting: "*Anastatus/ (Paravignalia)/ hemipterae*. R/ ex ω *Vitumnus/ scenicus* Bambey/ Risbec".

MNHN.14.81. Fifteen ♂ paralectotypes, dry mounted under one coverslip, many of them damaged, labeled in Risbec's handwriting: "s- plante sauvage/ Dagatiguy./ Abengourou/ *Anastatus* [crossed off]/ (*Paravignalia*)/ *hemipterae*/ Risbec" [there is also a piece of a leaf with five eggs attached, glued on the same slide].

MNHN.14.83. Two ♂ paralectotypes, of which one with head missing, both dry mounted under one round coverslip together with three insect eggs, labeled in Risbec's handwriting: "*Anastatus* [crossed off]/ (*Paravignalia*)/ *hemipterae*/ Risbec/ ex ω *Lepid./ Bambey*".



MNHN, ex. coll. ORSTOM.2.1. Seven ♂ paralectotypes, dry mounted under one coverslip, mostly in good condition, labeled in Risbec's handwriting: "Miscogast. [crossed off]/ Eupelmidae [crossed off]/ ex ω *Homoeocerus*/ avec *Hadronotus/ naevius*/ Alibert 744/ *Paravignalia hemipterae* Risbec".

MNHN, ex. coll. ORSTOM.2.3. Three ♂ paralectotypes, dry mounted under one coverslip, one specimen with head missing and another with broken antennae, labeled in Risbec's handwriting: "*Anastatus* (*Paravignalia*)/ *hemipterae* [overwritten in a different ink by:] *Aliberti* Risbec/ ex ω. Reduvidae [sic]/ Bambey/ Risbec" [see also under *Anastatus aliberti*].

MNHN, ex. coll. ORSTOM.2.11. Two ♂ paralectotypes, mounted in balsam under two coverslips, one badly crushed (only the entire one with long clava, hence the two males not conspecific), labeled in Risbec's handwriting: "= *Paravignalia hemipterae*/ Risbec/ ex *Nezara prunasi*/ *Anastatus* [with a sinuous arrow pointing to = *Paravignalia*]"

NON TYPE MATERIAL. — MNHN, ex. coll. ORSTOM.2.4. Two *Anastatus* males, dry mounted under one coverslip, clearly not conspecific with specimens on the previous slides, because of the antennal structure of the common *Anastatus*-type, labeled in Risbec's handwriting: "*Anastatus Aliberti* Risbec/ ♂./ ex ω *Hotteal subfasciata*./ Garoua I. 55/ Descamps. 223" [see also under *Anastatus aliberti*].

MNHN, ex. coll. ORSTOM.2.12. One male with the common *Anastatus*-type antennal structure, dry mounted, labeled in Risbec's handwriting: "*Anastatus hemipterae* Risb/ ♂/ M'Bam[bey] Wane."

MNHN, ex. coll. ORSTOM.2.13. Twenty-seven *Anastatus* spp. males, dry mounted under one coverslip, labeled in Risbec's handwriting: "*Anastatus* [crossed off]/ *Paravignalia hemipterae* Risbec/ ex ω *Homoeocerus pallens* et *yerburi*/ Garoua. 3-54 Descamps".

#### REMARKS

This species was described based on a long series of males reared from various hosts (Risbec 1951a); the specimens mentioned in the original description under letters b and f were not located in MNHN. The specimens on the last three slides are not part of the type series as they were not mentioned in the original description. Because the type series is heterogeneous and includes males of several *Anastatus* species, the male on slide ORSTOM. 2.2 is here designated lectotype. It is conspecific with the male on slide MNHN 14.22 (see under *Anastatus aliberti*) that contains also the lectotype and paralectotype females of *Anastatus aliberti*; all four specimens were reared from eggs of *Homoeocerus* Burmeister, 1835 (Hemiptera, Coreidae) at Abengourou. Risbec (1955), followed by Hedqvist (1970), considered this species as a synonym of *Anastatus aliberti* whereas Bouček (1976b) was reluctant to accept this synonymy. Since the lectotype of *Paravignalia hemipterae* is conspecific with a male that is most likely that of *A. aliberti*, this synonymy is accepted in the present paper.

#### *Polymoria curculionis* Risbec, 1951 (Fig. 1F, G)

*Polymoria curculionis* Risbec, 1951a: 245-247. Original description, ♀ ♂, Senegal, Bambey; 1960a: 628 (catalogued). — Hedqvist 1970: 441 (catalogued).

*Calosota curculionis* – Bouček 1976b (change of combination). — Gibson 1989: 63 (catalogued).

CURRENT TAXONOMIC STATUS. — *Calosota curculionis* (Risbec, 1951).

TYPE MATERIAL. — General collection. Lectotype ♀ (here designated): "Sénégal, Bambey/ X 1918 [probably X.48 from slide MNHN.14.74]; Muséum Paris; *Polymoria curculionis*/ Risbec.; Letotype [red label]". Nine ♀ paralectotypes: same labels except labeled with Paralectotype (red label).

MNHN.14.69. One ♀ paralectotype, dry mounted with the head detached, labeled in Risbec's handwriting: "18.7.46 Bambey/ *Polymoria curculionis* Risbec".

MNHN.14.70. One ♂ paralectotype, dry mounted, in good condition, labeled in Risbec's handwriting: "*Polymoria curculionis*/ Risbec/ ex *Cryptobathis setarius*".

MNHN.14.71. One ♀ paralectotype, dry mounted in a wooden slide, in good condition, labeled in Risbec's handwriting: "*Polymoria curculionis*/ Risbec; *Tanaostigmodes*/ (Eupelmidae)".

MNHN.14.72. One ♀ paralectotype, dry mounted in a wooden slide, in good condition, labeled in Risbec's handwriting: "IX.76/ *Polymoria curculionis*/ Risbec; *Eutrichosoma* [crossed off]/ ex *Cryptobathis setarius*".

MNHN.14.73. One ♀ paralectotype, balsam mounted in a wooden slide, labeled in Risbec's handwriting: "*Brasema* [crossed off]/ 13VIII.49/ *Polymoria curculionis*/ Risbec".

MNHN.14.74. Slide missing, 10 females point-mounted by David Brévière on 09/10/06. According to a personal communication by G. Gibson who examined the slide in 1991 it was originally labeled: "*Polymoria curculionis* Risbec; *Tanaostigmodes* X.18 [48 ?]".

NON TYPE MATERIAL. — ORSTOM.2.56: Two ♀, dry mounted under one coverslip on a wooden slide, in good condition, labeled in Risbec's handwriting: "(Eup. Tan)/ ex *Camptor/ rhinus*/ VIII.63.; *Polymoria curculionis*/ Risbec".

#### REMARKS

This species was described from 17 females and one male. Specimens on slide ORSTOM.2.56 are not from the type series as they were collected subsequently and from a different host. On slide MNHN.14.74 there were originally 12 specimens (G. Gibson, pers. comm.), but only ten of them were found remounted. One female from this slide was selected as lectotype. It is entire and was labeled accordingly. Bouček (1976b) transferred the species to *Calosota*.

#### *Polymoria halyomorphae* Risbec, 1951

*Polymoria halyomorphae* Risbec, 1951a: 243-245. Original description, ♀, Senegal, Bambey; 1950a: 404 (*nomen nudum*); 1960a: 656 (catalogued). — Herting 1971: 88 (catalogued).

*Calosota halyomorphae* – Hedqvist 1970: 420-423, 439 (lectotype designation, change of combination, redescribed, figured, keyed). — Gibson 1989: 63 (catalogued).

CURRENT TAXONOMIC STATUS. — *Calosota halyomorphae* (Risbec, 1951).

TYPE MATERIAL. — General collection. Lectotype ♀: "*Polymoria halyo[mo]rphae* Risbec/ ex ω. *Halyomorpha annulicornis* [label detached from a slide, in Risbec's handwriting]; Lectotypus ♀/ *Polymoria halyomorphae* Risb./ K-J Hedqvist det. 1965; *Calosota halyomorphae*".

#### REMARKS

This species was described based on at least two specimens: "Longueur du corps: 3,2 et 2,85 mm". Hedqvist (1970) reports

seeing two specimens on one slide (slide MNHN.14.68 is missing), but there is only one remounted female in the general collection (the lectotype). In BMNH there is a specimen without locality data, originating from Hedqvist's personal collection but with an identification label by Hedqvist: "*Calosotal halyomorphae* (Risb./ ♀/ K-J Hedqvist det. 69". This is a paralectotype of *Polymoria halyomorphae* since Hedqvist (1970), when redescribing the species, mentions only the two Risbec's syntypes, without any other additional specimens.

### *Vignalia halyomorphae* Risbec, 1951

*Vignalia halyomorphae* Risbec, 1951a: 272-273. Original description, ♀ ♂, Senegal, Bambey; 1950a: 404 (*nomen nudum*); 1955: 218 (synonym of *Anastatus nezarae* Risbec); 1960a: 656 (valid species). — Hedqvist 1970: 431 (synonym of *Anastatus apantelesi* var. *pseudocreobotrae*). — Nonveiller 1984: 122 (synonym of *Anastatus nezarae* Risbec).

CURRENT TAXONOMIC STATUS. — *Anastatus* (*Anastatus*) *halyomorphae* (Risbec, 1951) rest. stat. and n. comb.

TYPE MATERIAL. — MNHN, ex. coll. ORSTOM.2.9. Lectotype ♂ (here designated), dry mounted, in good condition, with the head detached but present, labeled in Risbec's handwriting: "*Anastatus* (*Vignalia*) *halyomorphae* Risbec/ s- niebe 4.12.1946/ Bambey, Risbec/ Sénégal" and "TYPE [red label]; LECTOTYPE [red label]; ♂ designated/ by Ebrahimi/ 2006".

MNHN.14.78. Two ♂ paralectotypes, dry mounted under one coverslip and some bits under a second coverslip, both with head detached, but only one head present, with left antenna missing beyond scape and right antenna missing the apical part, labeled in Risbec's handwriting: "ex ω./ *Halyomorpha annulicornis* III.42/ *Anastatus nezarae* R [later addition in a different ink]/ = [in the same different ink] *Vignalia halyomorphae* Risbec".

MNHN, ex. coll. ORSTOM.2.8. One ♂ paralectotype, dry mounted, crushed under the coverslip and with both antennae missing, labeled in Risbec's handwriting: "*Vignalia halyomorphae* Risbec/ Syn.; *Anastatus*/ ex *Halyomorpha annulicornis* - III.42/ Bambey/ Risbec Senegal" and "TYPE [red label]".

NON TYPE MATERIAL. — MNHN.14.79. A dry mounted *Anastatus* male, completely crushed under the coverslip, labeled in Risbec's handwriting: "*Anastatus halyomorphae* [crossed off] Risbec/ = *Vignalia halyom.*/ ex ω. *Papilio demodocus* 24.1[?].42, Bambey".

MNHN, ex. coll. ORSTOM.2.10. Two *Anastatus* males mounted in balsam under the same coverslip, labeled in Risbec's handwriting: "*Anastatus* (*Vignalia*) *halyomorphae* R/ ex ω Lepidopt./ (*Chrysops*?)/ Bambey".

#### REMARKS

Males on slides MNHN.14.79 and ORSTOM.2.10 are not part of the type series, as the species was described based on males reared from *Halyomorpha annulicornis* (Signoret, 1858) eggs (Hemiptera, Pentatomidae) and one specimen collected on black-eyed pea (niébé). Specimens on these two slides were reared from Lepidoptera eggs and have antennae with a very long clava. Specimens on slides MNHN, ORSTOM.2.8, 2.9 and MNHN.14.78 have the right labels and are all regarded as syntypes, but each slide apparently contains males of a different species (i.e. three species involved). Although the male on slide ORSTOM.2.8 fits better the original description, it lacks both antennae and the head is badly damaged. Because

of this, the male on slide ORSTOM.2.9, collected on black-eyed pea (niébé), is selected as lectotype.

The original description wrongly states that the species was described based on both females and males. Risbec (1955), synonymized *Vignalia halyomorphae* under *Anastatus nezarae* Risbec, 1951 (= *A. apantelesi*). Nonveiller (1984) has repeated this synonymy but it does not seem to be supported because, as noted above, Risbec identified as *Vignalia halyomorphae* the males of at least three different *Anastatus* species. Hedqvist (1970) accidentally listed *V. halyomorphae* as a synonym of *Anastatus apantelesi* var. *pseudocreobotrae* Risbec, 1951.

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